

# **Maintenance and Service Guide**

## **Compaq Presario 5400 Series Computers**

### **[Product Description](#)**

### **Troubleshooting**

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### **Removal & Replacement Procedures**

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To report a technical problem, contact your Regional Support Center or IM Help Center.

For content comments or questions, contact [Tech Support](#).

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***Online Maintenance and Service Guide***  
**Compaq Presario 5400 Series Personal Computers**

August 1999



# PREFACE

This *Maintenance and Service Guide* is a troubleshooting guide that can be used for reference when servicing the Compaq Presario 5400 Series Personal Computers.

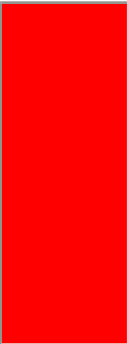
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## Symbols

The following words and symbols mark special messages throughout this guide.

	<b>WARNING:</b> Text set off in this manner indicates that failure to follow directions in the warning could result in bodily harm or loss of life.
	<b>CAUTION:</b> Text set off in this manner indicates that failure to follow directions could result in damage to equipment or loss of data.
<b>IMPORTANT:</b>	Text set off in this manner presents clarifying information or specific instructions.
<b>NOTE:</b>	Text set off in this manner presents commentary, sidelights, or interesting points of information.

## Technician Notes

	<b>WARNING:</b> Only authorized technicians trained by Compaq should repair this equipment. All troubleshooting and repair procedures are detailed to allow only subassembly/module level repair. Because of the complexity of the individual boards and subassemblies, the user should not attempt to make repairs at the component level or to make modifications to any printed circuit board. Improper repairs can create a safety hazard. Any indications of component replacement or printed circuit board modifications may void any warranty.
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## Locating Additional Information

The following documentation is available to support this product:

- Compaq Presario documentation set
- *Introducing Windows 98 Guide*
- Service Training Guides
- Compaq Service Advisories and Bulletins
- *Compaq QuickFind*
- *Compaq Service Quick Reference Guide*
- *Compaq Help Center*

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## PRODUCT DESCRIPTION

### Compaq Presario 5400 Series Standard Configuration

Models	Processor	Hard drive GB	RAM MB	Modem
North America (NA)				
5423	K6-II (450)	4.3	32	PCI - 56K
5440	K6-II (450)	6.0	64	PCI - 56K
5441	K6-II (475)	8.0	64	PCI - 56K
*5443	K6-II (475)	8.0	64	PCI - 56K
5447	K6-II (450)	8.0	64	PCI - 56K
*5451	K6-II (500)	13.0	96	PCI - 56K
5457	K6-II (475)	13.0	64	PCI - 56K
*5460	K6-II (475)	8.0	96	PCI - 56K
*5461	K6-II (500)	10.0	64	PCI - 56K
*5465	K6-II (475)	13.0	64	PCI - 56K

**IMPORTANT:**      \* The following components are supported by these models:

**100-MB ZIP Drive** (Models: 5460 and 5465)  
**Display - 15 inch** (Models: 5460 and 5465)  
**CD-RW** (Models: 5451 and 5461)  
**Network Interface Card** (Models: 5443 and 5451)

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## PRODUCT DESCRIPTION

### *CPU Controls and Lights*

- 1** CD Drive Tray
- 2** CD Drive Activity Light
- 3** Diskette Drive
- 4** Diskette Drive Activity Light
- 5** ZIP Drive or Hard Drive
- 6** ZIP Drive or Hard Drive Activity Light
- 7** CD Drive Eject Button
- 8** CD Drive Manual Eject Hole
- 9** Diskette Drive Eject Button
- 10** ZIP Drive Activity Light
- 11** Standby Button
- 12** Power Indicator Light

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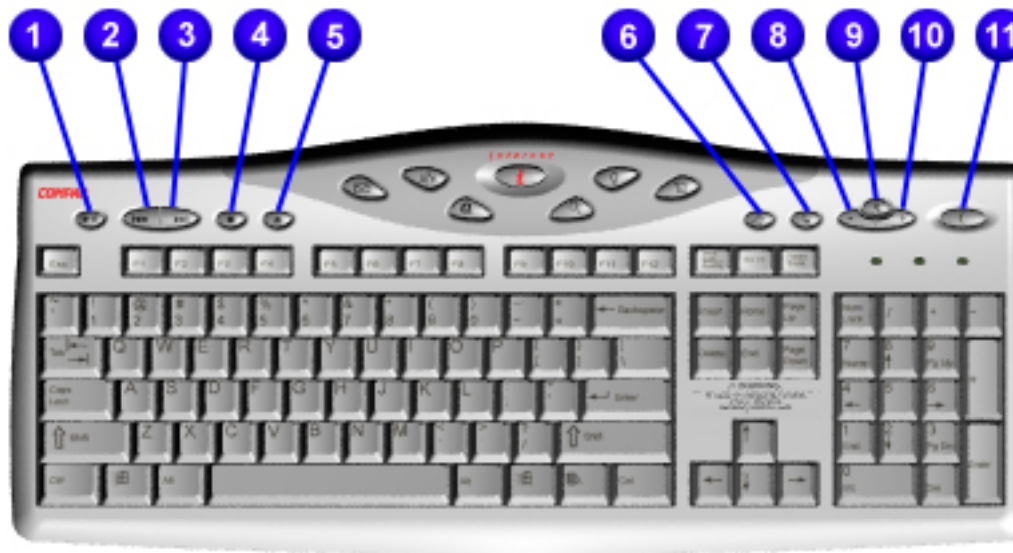
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## PRODUCT DESCRIPTION

### *Keyboard Controls and Lights*

#### Easy Access Internet Keyboard

**Top left and right controls** (click here for [keyboard top right corner](#) assignments)



- 1** Play/pause
- 2** Previous track
- 3** Next track
- 4** Stop
- 5** Load/Eject CD
- 6** Print
- 7** Application launch
- 8** Volume down
- 9** Mute
- 10** Volume up
- 11** Sleep button

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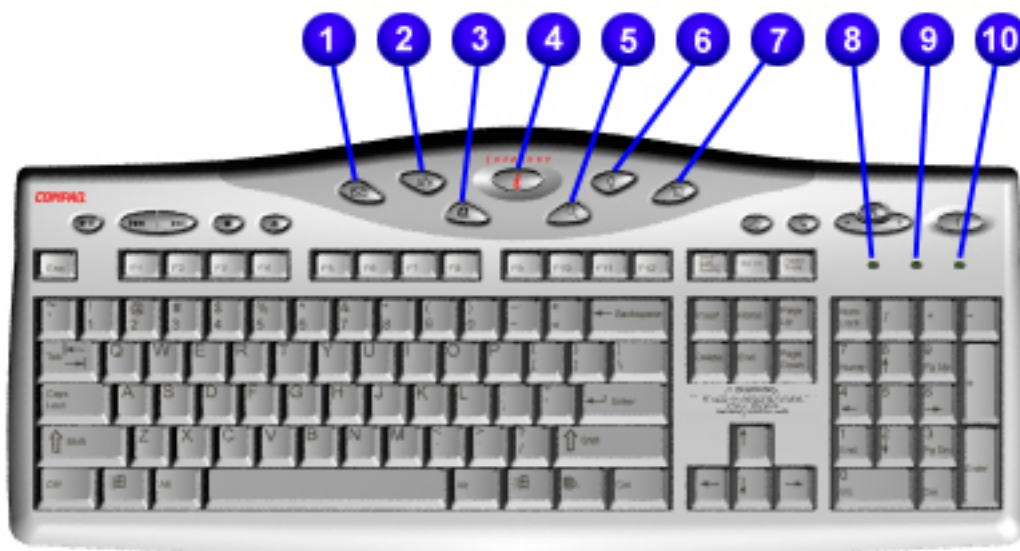
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## PRODUCT DESCRIPTION

### *Keyboard Controls and Lights*

**Easy Access Internet Keyboard** ([Back to Easy Access Internet Keyboard](#))

**Center controls and upper right corner lights**



- 1** Instant e-mail
- 2** Community
- 3** My Presario
- 4** Instant Internet
- 5** Instant search
- 6** Instant answer
- 7** Secure e-commerce/Featured Web site
- 8** Num lock light
- 9** Caps lock light
- 10** Scroll lock light



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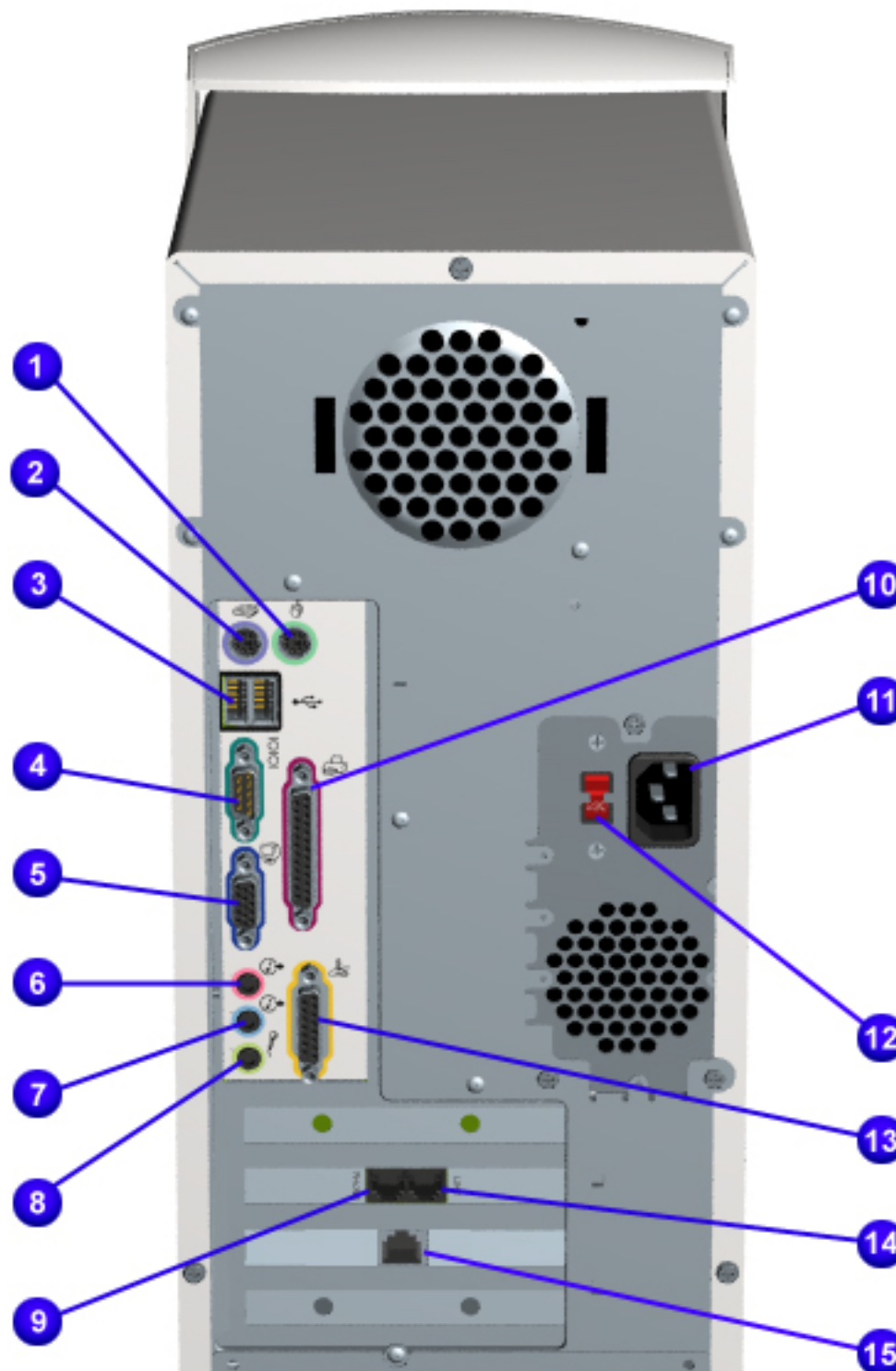
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## PRODUCT DESCRIPTION

### *CPU Rear Connectors*



- 1 Mouse
- 2 Keyboard
- 3 USB Port
- 4 Serial Port
- 5 SVGA Monitor Port
- 6 Audio Line Out
- 7 Audio Line In
- 8 Microphone In
- 9 Modem (line)
- 10 Parallel (printer) Port
- 11 AC Power Connector
- 12 Voltage Select Switch
- 13 Game Port
- 14 Modem (phone)
- 15 \*Network Interface Connector

**IMPORTANT:** Network Interface Connector on selected models.

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## PRODUCT DESCRIPTION

### Power Cord Set Requirements

The power cord set (flexible cord and wall plug) received with the computer meets the requirements for use in the country where the computer was purchased.

Power cord sets for use in other countries must meet the requirements of the country where you use the computer. For more information on power cord set requirements, contact your Compaq authorized dealer, reseller, or service provider.

#### General Requirements

The requirements listed below are applicable to all countries:

- 1 The length of the power cord set must be at least 6.00 feet (1.8 m) and a maximum of 9.75 feet (3.0 m).
- 2 All power cord sets must be approved by an acceptable accredited agency responsible for evaluation in the country where the power cord set will be used.
- 3 The power cord set must have a minimum current capacity of 10A and a nominal voltage rating of 125 or 250 volts AC, as required by each country's power system.
- 4 The appliance coupler must meet the mechanical configuration of an EN 60 320/IEC 320 Standard Sheet C13 connector, for mating with appliance inlet on the Switch Box.

#### Country-Specific Requirements

	Country	Accredited Agency
	United States	UL*

\* The flexible cord must be Type SJT-2 or equivalent, No. 18 AWG, 3-conductor. The wall plug must be a two-pole grounding type with a NEMA 5-15P (15A, 125V) or NEMA 6-15P (15A, 250V) configuration.

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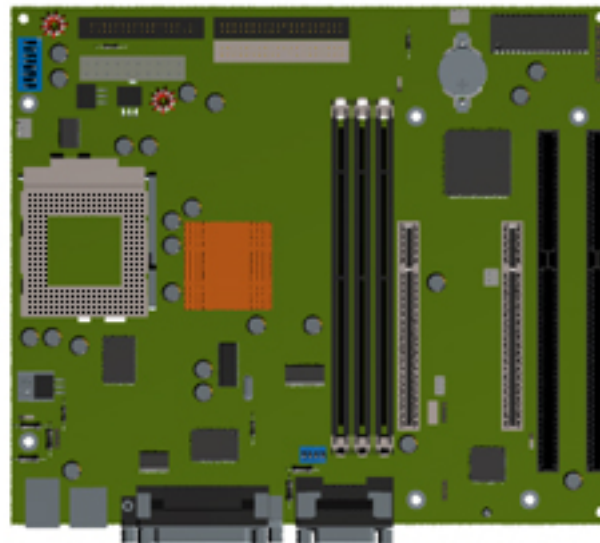
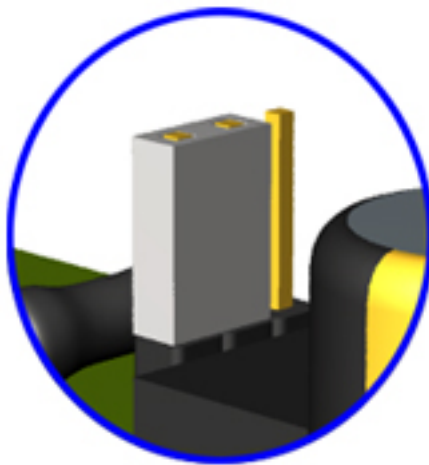
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## TROUBLESHOOTING

### *Clearing CMOS*

If the power-on password is unknown, clearing CMOS will disable the password and allow the computer to be operated.

The location of the Real-time Clock (RTC) battery is shown on the system board illustration below.



- 1 Complete the [preparation for disassembly](#).
- 2 [Remove the chassis cover](#).
- 3 [Remove the fax/modem board](#).
- 4 [Remove the Network Interface Card](#).
- 5 [Remove the system board](#).
- 6 [Remove the RTC battery](#).

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TROUBLESHOOTING

*Power-On Self Test (POST)*

**POST** is a series of diagnostic tests that run automatically when the system is turned on. After the computer is turned on, **POST** checks the following assemblies to ensure that the computer system is properly functioning:

- Keyboard
- System board
- Memory modules
- Video memory
- Diskette drives
- Hard drive
- Power supply

**POST** also detects the type of mass storage devices installed in the computer.

If **POST** finds an error in the system, an error condition is indicated by an audible and/or visual message. The table below gives explanations of the error codes and a recommended course of action.

<b>NOTE:</b>	An external speaker must be installed into the speaker output connector to hear audible beeps during <b>POST</b> .
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Click a link below to find the probable cause and recommended action for a given error message.

<a href="#">Diskette Drive A or B Error</a>	<a href="#">Keyboard Controller Error</a>	<a href="#">System BIOS Shadowed</a>
<a href="#">Extended RAM failed at offset <i>nnn</i></a>	<a href="#">Keyboard Error</a>	<a href="#">System Cache Error</a>
<a href="#">Failing Bits <i>nnn</i></a>	<a href="#">Operating System Not Found</a>	<a href="#">System CMOS Checksum Bad</a>
<a href="#">Fixed Disk 0 or 1 Failure</a>	<a href="#">Parity Check 1</a>	<a href="#">System RAM Failed at Offset, <i>nnn</i></a>
<a href="#">Fixed Disk Controller Failure</a>	<a href="#">Parity Check 2</a>	<a href="#">System Timer Error</a>
<a href="#">Incorrect Drive A Type</a>	<a href="#">Real Time Clock Error</a>	<a href="#">UMB Upper Limit Segment Address <i>nnn</i></a>
<a href="#">Invalid NVRAM Media Type</a>	<a href="#">System Battery is Dead</a>	<a href="#">Video BIOS Shadowed</a>

POST Messages

Error message	Probable Cause	Recommended Action
Diskette Drive A or B Error	Drive A: or B: is present, but fails the BIOS POST diskette tests	1. Run <a href="#">Setup</a> . 2. Replace the signal cables. 3. Replace the drive.
Extended RAM failed at offset <i>nnn</i>	Extended memory not working or not configured properly	1. Replace the <a href="#">memory modules</a> . 2. Replace the <a href="#">system board</a> .
Failing Bits <i>nnn</i>	<i>nnn</i> is a map of the bits at the RAM address which failed the memory test	1. Run <a href="#">Setup</a> . 2. Replace the <a href="#">system board</a> .
Fixed Disk 0 or 1 Failure	Hard drive is not working or not configured properly	1. Run <a href="#">Setup</a> . 2. Replace the signal cable. 3. Replace the hard drive.
Fixed Disk Controller Failure	Hard drive is not working or not configured properly	1. Run <a href="#">Setup</a> . 2. Replace the <a href="#">system board</a> .
Incorrect Drive A Type	Type of diskette in drive A: not correctly identified	1. Run <a href="#">Setup</a> . 2. Replace the <a href="#">diskette drive</a> .
Invalid NVRAM Media Type	Problem with NVRAM (CMOS) access	Replace the <a href="#">system board</a> .
Keyboard Controller Error	Keyboard, I/O keyboard controller (on system board), or mouse error	1. Replace the keyboard. 2. Replace the mouse. 3. Replace the <a href="#">system board</a> .
Keyboard Error	Keyboard, I/O keyboard controller (on system board), or mouse error	1. Replace the keyboard. 2. Replace the mouse. 3. Replace the <a href="#">system board</a> .
Operating System Not Found	Operating system cannot be located on either drive A: or C:	Run <a href="#">Setup</a> .
Parity Check 1	Parity error found in the system bus	1. Run <a href="#">Setup</a> . 2. Replace the <a href="#">memory modules</a> . 3. Replace the <a href="#">system board</a> .
Parity Check 2	Parity error found in the I/O bus	1. Run <a href="#">Setup</a> . 2. Replace the <a href="#">ISA board (modem)</a> .
Real Time Clock Error	Real-time clock fails BIOS test	Replace the <a href="#">system board</a> .
System Battery is Dead	RTC battery is dead	1. Replace the <a href="#">RTC battery</a> . 2. Run <a href="#">Setup</a> .
System BIOS Shadowed	System BIOS copied to Shadow RAM	Status message. No action required.
System Cache Error	RAM cache failed the BIOS test	Run <a href="#">Setup</a> .
System CMOS Checksum Bad	CMOS is corrupted or modified incorrectly	Run <a href="#">Setup</a> .
System RAM Failed at Offset, <i>nnn</i>	System RAM failed	Replace <a href="#">memory modules</a> .
System Timer Error	DMA, timers, etc.	Replace the <a href="#">system board</a> .
UMB Upper Limit Segment Address <i>nnn</i>	Displays the address <i>nnn</i> of the upper limit of Upper Memory Blocks, indicating released segments of the BIOS	Status message. No action required.
Video BIOS Shadowed	Video BIOS successfully copied to shadow RAM	Status message. No action required.



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## TROUBLESHOOTING

### Configuration

This section explains how to use Setup and Compaq Utilities which should be accessed in the following instances:

- When a system configuration error is detected during the Power-On Self-Test (POST)
- To change factory default settings for some of the computer features
- To change the system configuration, which is sometimes necessary when you add or remove optional hardware
- To set system configuration features

Click a link below to go to the appropriate subsection.

#### [Preparing the Computer](#)

##### [Setup](#)


##### [Accessing Compaq Utilities Options](#)

##### [View System Information \(INSPECT\)](#)

### Preparing the Computer

If you encounter an error condition, complete the following steps before starting problem isolation procedures:

- 1 Ensure proper ventilation. The computer should have a 3-inch (7.6 cm) clearance at the back of the system unit.
- 2 Turn off the computer and peripheral devices.



**CAUTION:** Always ensure that the power is off before disconnecting or reconnecting the mouse, keyboard, or any other peripheral devices. Disconnecting or connecting the keyboard or mouse while the unit power is on can damage the system board.

- 3 Disconnect any peripheral devices other than the monitor and keyboard. Do not disconnect the printer if you want to test it or use it to log error messages.
- 4 Install loop-back and terminating plugs for complete testing.

### Setup

The Setup utility gives a snapshot of the computer's hardware configuration, aids in troubleshooting, and sets custom features. Setup recognizes a new internal component or an external device and automatically updates the configuration screens. Use the Setup utility to:

- Modify settings for audio, storage, power management, communications, and input devices
- Get an overall picture of the computer's hardware configuration
- Verify configuration parameters in determining problems
- Set time and date

#### ***Running Setup***

To access the Setup utility, turn on the computer and press the **F10** key when the Compaq logo appears. A menu will appear on your screen.

**NOTE:**

The actual menu displayed on your computer may vary slightly, depending on your configuration.

### Accessing Compaq Utilities Options

This section provides information about the menu options accessible from the **Compaq Utilities** menu.

#### ***Create a Compaq Utilities Diskette***

A Compaq Utilities diskette must be created to troubleshoot the system. To create a Compaq Utilities diskette, complete the following steps:

- 1 Insert the *QuickRestore CD* into the CD drive.
- 2 From the Windows desktop, click on **Start**, then **Program**, then **Windows Explorer**.
- 3 Click on the CD drive icon.
- 4 Double-click on the **PCdiags** folder.
- 5 Insert a diskette in the diskette drive.
- 6 Double-click on the **QRST5.exe** icon.
- 7 Press **Enter** when the QuickRestore label appears.
- 8 After the CD has completed copying to the diskette, eject the *QuickRestore CD*.

#### ***Running Compaq Utilities***

To run Compaq Utilities, turn on or reboot the computer with the Compaq Utilities diskette in the diskette drive. A menu will appear on your screen.

### View System Information (INSPECT)

The View System Information (INSPECT) utility provides information about the system once it has been configured. INSPECT operates with MS-DOS and provides information about the system operating environment including:

- Contents of the operating system startup files
- Current memory configuration
- ROM version
- Type of processor and coprocessor
- Diskette and hard drives
- Active printer and communications interfaces
- Modem

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TROUBLESHOOTING

Diagnostic Error Codes

Diagnostic error codes occur if the system recognizes a problem while running the Compaq Utilities program. These error codes help identify possibly defective subassemblies.

Tables listed on this page give possible error codes, descriptions of each error condition, and actions required to resolve the error condition.

<b>IMPORTANT:</b>	Retest the system after completing each step. If the problem has been resolved, do not proceed with the remaining steps.
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For assistance in the removal and replacement of a particular subassembly, see [Removal and Replacement Procedures](#).

<b>100-xx</b>	<a href="#">Processor</a>	<b>1100-xx</b>	<a href="#">Serial</a>	<b>3200-xx</b>	<a href="#">Audio</a>
<b>200-xx</b>	<a href="#">Memory</a>	<b>1200-xx</b>	<a href="#">Modem</a>	<b>3300-xx</b>	<a href="#">CD Drive</a>
<b>300-xx</b>	<a href="#">Keyboard</a>	<b>1700-xx</b>	<a href="#">Hard drive</a>	<b>8600-xx</b>	<a href="#">Pointing device interface</a>
<b>400-xx</b>	<a href="#">Parallel (printer)</a>	<b>1900-xx</b>	<a href="#">Tape drive</a>	<b>XXXX-xx</b>	<a href="#">CD-RW Drive</a>
<b>600-xx</b>	<a href="#">Diskette drive</a>	<b>2400-xx</b>	<a href="#">Video</a>	<b>XXXX-xx</b>	<a href="#">ZIP Drive</a>

Keyboard error codes

Error Code	Description	Recommended Action
<b>301-xx</b>	Keyboard short test, 8042 self-test failed	The following steps apply to error codes 301-xx through 304-xx:  1    Check the keyboard connection. If disconnected, turn the computer off and connect the keyboard.  2    Replace the keyboard and retest.  3    Replace the <a href="#">system board</a> and retest.
<b>302-xx</b>	Keyboard long test failed	
<b>303-xx</b>	Keyboard LED test, 8042 self-test failed	
<b>304-xx</b>	Keyboard typematic test failed	

Parallel (printer) error codes

Error Code	Description	Recommended Action
<b>401-xx</b>	Printer failed or not connected	The following steps apply to error codes 401-xx through 498-xx:  1    Connect the printer.  2    Check power to the printer.  3    Install the loop-back connector and retest.  4    Replace <a href="#">system board</a> and retest.
<b>402-xx</b>	Printer data register failed	
<b>403-xx</b>	Printer pattern test failed	
<b>498-xx</b>	Printer failed or not connected	

Serial error codes

Error Code	Description	Recommended Action
<b>1101-xx</b>	Serial Port Test	The following steps apply to error codes 1101-xx through 1109-xx:  1    Check the switch settings on the serial/parallel device, if applicable.  2    Replace the <a href="#">system board</a> and retest.
<b>1109-xx</b>	Clock Register Test	

Modem error codes

Error Code	Description	Recommended Action
<b>1201-xx</b>	Modem Internal Loop-Back Test	The following steps apply to error codes 1201-xx through 1210-xx:  1    Refer to modem documentation for correct Setup procedures.  2    Check the modem line.  3 <a href="#">Replace the modem</a> and retest.
<b>1202-xx</b>	Modem Time-Out Error	
<b>1203-xx</b>	Modem External Termination Test	
<b>1204-xx</b>	Modem Auto Originate Test	
<b>1206-xx</b>	Dial Multifrequency Tone Test	
<b>1210-xx</b>	Modem Direct Connect Test	

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Hard drive error codes		
Error Code	Description	Recommended Action
1700-xx	Hard drive ID types test failed	The following steps apply to error codes 1700-xx through 1799-xx:  1 Run <a href="#">Setup</a> and verify drive type.  2 <a href="#">Replace the hard drive signal and power cables</a> and retest.  3 <a href="#">Replace the hard drive</a> and retest.  4 Replace the <a href="#">system board</a> and retest.
1701-xx	Hard drive format test failed	
1702-xx	Hard drive read test failed	
1703-xx	Hard drive write/read/compare test failed	
1704-xx	Hard drive random seek test failed	
1705-xx	Hard drive controller test failed	
1706-xx	Hard drive ready test failed	
1707-xx	Hard drive recalibration test failed	
1708-xx	Hard drive format bad track test failed	
1709-xx	Hard drive reset controller test failed	
1710-xx	Hard drive park head test failed	
1714-xx	Hard drive file write test failed	
1715-xx	Hard drive head select test failed	
1716-xx	Hard drive conditional format test failed	
1717-xx	Hard drive ECC* test failed	
1719-xx	Hard drive power mode test failed	
1719-x	Hard drive power mode test failed	
1730-x	Fixed Disk 0 does not support DMA Mode	
1731-x	Fixed Disk 1 does not support DMA Mode	
1740-x	Fixed Disk 0 failed Set Block Mode command	
1741-x	Fixed Disk 1 failed Set Block Mode command	
1750-x	Fixed Disk 0 failed Identify command	
1751-x	Fixed Disk 1 failed Identify command	
1760-x	Fixed Disk 0 does not support Block Mode	
1761-x	Fixed Disk 1 does not support Block Mode	
1790-x	Disk 0 Configuration Error	
1792-x	Secondary Disk Controller Failure	
1799-xx	Invalid hard drive type failed	

Tape drive error codes		
Error Code	Description	Recommended Action
1900-xx	Tape ID failed	The following steps apply to error codes 1900-xx through 1906-xx: 1 Replace the tape cartridge and retest. 2 Check and/or replace the signal cable and retest. 3 Replace the tape drive and retest. 4 Replace the <a href="#">system board</a> and retest.
1901-xx	Tape servo write failed	
1902-xx	Tape format failed	
1903-xx	Tape drive sensor test failed	
1904-xx	Tape BOT/EOT test failed	
1905-xx	Tape read test failed	
1906-xx	Tape write/read/compare failed	

Pointing device interface error codes		
Error Code	Description	Recommended Action
8601-xx	Pointing Device Interface test failed	1. Replace with a working pointing device and retest. 2. Replace the <a href="#">system board</a> and retest.

Audio error codes		
Error Code	Description	Recommended Action
3206-xx	Audio System Internal Error	Replace the <a href="#">system board</a> and retest.

ZIP Drive error codes		
Error Code	Description	Recommended Action
xxxx-xx	ZIP drive	The following steps apply to error codes xxxx-xx through xxxx-xx and xxxx-xx: 1 2 3 4

CD-RW Drive error codes		
Error Code	Description	Recommended Action
xxxx-xx	CD-RW drive	The following steps apply to error codes xxxx-xx through xxxx-xx and xxxx-xx: 1 2 3 4

CD or DVD Drive error codes		
Error Code	Description	Recommended Action
3301-xx 3305-xx 66XX-xx	CD or DVD drive read test failed	The following steps apply to error codes 3301-xx through 3305-xx and 66XX-xx: 1 Replace the CD or DVD disk and retest.* 2 Check the jumper settings on the CD or DVD drive. 3 <a href="#">Check and/or replace the power and signal cables</a> and retest. 4 <a href="#">Replace the CD or DVD drive</a> and retest.

*\* Boot to DOS (Command Prompt only) or Windows (Not Safe Mode). Press the CD or DVD drive eject button (located on the front bezel) to eject the CD or DVD and retest.*



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Diagnostic Error Codes (continued)

Video error codes		
Error Code	Description	Recommended Action
2402-xx	Video memory test failed	The following steps apply to error codes 2402-xx through 2456-xx:  1 Run <a href="#">Setup</a> .  2 Replace the <a href="#">system board</a> and retest.
2403-xx	Video attribute test failed	
2404-xx	Video character set test failed	
2405-xx	Video 80 × 25 mode 9 × 14 character cell test failed	
2406-xx	Video 80 × 25 mode 8 × 8 character cell test failed	
2407-xx	Video 40 × 25 mode test failed	
2408-xx	Video 320 × 200 mode color set 0 test failed	
2409-xx	Video 320 × 200 mode color set 1 test failed	
2410-xx	Video 640 × 200 mode test failed	
2411-xx	Video screen memory page test failed	
2412-xx	Video gray scale test failed	
2414-xx	Video white screen test failed	
2416-xx	Video noise pattern test failed	
2418-xx	ECG/VGC memory test failed	
2419-xx	ECG/VGC ROM checksum test failed	
2420-xx	ECG/VGC attribute test failed	
2421-xx	ECG/VGC 640 × 200 graphics mode test failed	
2422-xx	ECG/VGC 640 × 350 16-color set test failed	
2423-xx	ECG/VGC 640 × 350 64-color set test failed	
2424-xx	ECG/VGC monochrome text mode test failed	
2425-xx	640 × 480 graphics test failure	
2431-xx	640 × 480 graphics test failure	
2432-xx	320 × 200 graphics (256-color mode) test failed	
2448-xx	Advanced VGA Controller test failed	The following steps apply to error codes 2468-xx through 2480-xx:  1 Run <a href="#">Setup</a> .  2 Replace the <a href="#">system board</a> and retest.
2451-xx	132-column Advance VGA test failed	
2456-xx	Advanced VGA 256-Color test failed	
2468-xx	Advanced VGA BitBLT test	
2477-xx	Advanced VGA datapath test	The following steps apply to error codes 2468-xx through 2480-xx:  1 Run <a href="#">Setup</a> .  2 Replace the <a href="#">system board</a> and retest.
2478-xx	Advanced VGA BitBLT test	
2480-xx	Advanced VGA Linedraw test	

Processor error codes		
Error code	Description	Recommended action
101-xx	CPU test failed	Replace the <a href="#">system board</a> and retest.
102-xx	Processor error	1. Run <a href="#">Setup</a> and retest. 2. Replace the processor and retest.
103-xx	DMA controller failed	The following step applies to error codes 103-xx through 106-xx:  Replace the <a href="#">system board</a> and retest.
104-xx	Interrupt controller failed	
105-xx	Port error	
106-xx	Keyboard controller self-test failed	
107-xx	CMOS RAM test failed	The following steps apply to error codes 107-xx through 109-xx:  1. Replace the <a href="#">battery/clock module</a> and retest. 2. Replace the <a href="#">system board</a> and retest.
108-xx	CMOS interrupt test failed	
109-xx	CMOS clock test failed	
110-xx	Programmable timer test failed	The following step applies to error codes 110-xx through 113-xx:  Replace the <a href="#">system board</a> and retest.
111-xx	Refresh detect test failed	
112-xx	Speed test failed	
113-01	Protected mode test failed	
114-xx	Speaker test failed	1. Verify the speaker connection. 2. Replace the <a href="#">system board</a> and retest.
199-xx	Installed devices test failed	1. Check system configuration. 2. Verify cable connections. 3. Check switch settings. 4. Run <a href="#">Compaq Utilities</a> . 5. Replace the <a href="#">system board</a> and retest.

Monitor (VGA or flat-panel) error codes		
Error Code	Description	Recommended Action
501-xx	Video controller test failed	The following step applies to error codes 501-xx through 516-xx:  Replace the <a href="#">system board</a> and retest.
502-xx	Video memory test failed	
503-xx	Video attribute test failed	
504-xx	Video character set test failed	
505-xx	Video 80 × 25 mode 9 × 14 character cell test failed	
506-xx	Video 80 × 25 mode 9 × 14 character cell test failed	
507-xx	Video 40 × 25 mode test failed	
508-xx	Video 320 × 200 mode color set 0 test failed	
509-xx	Video 320 × 200 mode color set 1 test failed	
510-xx	Video 640 × 200 mode test failed	
511-xx	Video screen memory page test failed	
512-xx	Video gray scale test failed	
514-xx	Video white screen test failed	
516-xx	Video noise pattern test failed	

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Memory error codes

Error Code	Description	Recommended Action
200-xx	Invalid memory configuration	1. Verify memory module value compatibility. 2. <a href="#">Reinsert memory</a> in the correct location.
201-xx	Memory machine ID test failed	The following steps apply to error codes 201-xx and 202-xx:
202-xx	Memory system ROM checksum failed	1 Flash the ROM and retest. 2 <a href="#">Replace the memory</a> and retest. 3 Replace the <a href="#">system board</a> and retest.
203-xx	Memory write/read test failed	The following steps apply to error codes 203-xx through 210-xx:  1 <a href="#">Remove one memory module</a> at a time until the error message stops. 2 <a href="#">Replace other removed modules</a> one at a time, testing each to ensure the error does not return. 3 Replace the <a href="#">system board</a> and retest.
204-xx	Memory address test failed	
206-xx	Increment pattern test failed	
210-xx	Random pattern test failed	

Diskette drive error codes

Error Code	Description	Recommended Action
600-xx	Diskette ID drive types test failed	The following steps apply to error codes 600-xx through 698-xx:  1 Replace the diskette and retest.  2 <a href="#">Check and/or replace the diskette power and signal cables</a> and retest.  3 <a href="#">Replace the diskette drive</a> and retest.  4 Replace the <a href="#">system board</a> and retest.
601-xx	Diskette format failed	
602-xx	Diskette read test failed	
603-xx	Diskette write, read, compare test failed	
604-xx	Diskette random seek test failed	
605-xx	Diskette ID media test failed	
606-xx	Diskette speed test failed	
607-xx	Diskette wrap test failed	
608-xx	Diskette write-protect test failed	
609-xx	Diskette reset controller test failed	
610-xx	Diskette change line test failed	
694-xx	Pin 34 is not cut on 360KB diskette drive	
697-xx	Diskette type error	
698-xx	Diskette drive speed not within limits	
699-xx	Diskette drive/media ID error	1. Replace media. 2. Run <a href="#">Setup</a> .

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## TROUBLESHOOTING

### Troubleshooting Without Diagnostics

This section describes some simple, preliminary tests and guidelines for troubleshooting the computer.

#### Checklist For Solving Minor Problems

If you encounter some minor problem with the computer or software application, go through the following checklist for possible solutions before running any of the diagnostic utilities:

- Is the computer connected to a working power outlet?
- Is the computer turned on and the power light illuminated?
- Are all cables connected properly and seated?
- Are all of the necessary device drivers installed?
- Is the *CONFIG.SYS* file correct?
- Is the *AUTOEXEC.BAT* file (MS-DOS) or *STARTUP.CMD* file correct?
- Was a nonbootable diskette loaded in the diskette drive at power-up?
- Are all switch settings correct?
- Was Computer Setup run after installing options (memory, disk drives, etc.) and before installing industry standard architecture boards?

Quick checks and possible solutions for problems related to these topics:

CD drive

Hard drive

Power

Diskette drive

Hardware installation

USB ports

are provided in the tables below. The procedure for [resolving hardware conflicts](#) is also described.

CD drive		
Problem	Probable cause(s)	Possible solution
Cannot read compact disc.	CD is not properly seated in the drive.	Eject the CD, then re-insert it, pressing down on the CD firmly to correctly seat it in the drive.
	CD has been loaded upside down.	Eject the CD, turn it over, then reload.
	CD may be dirty or scratched.	Clean the CD or load another CD.
Cannot eject compact disc (tray-load only).	CD is not properly seated in the drive.	Turn off the computer, insert a straightened paper clip into the emergency eject hole, then push firmly. Slowly pull the tray out from the drive until the tray is fully extended, then remove the CD.
CD drive devices are not detected.	Power cycle delay.	After turning the computer off, wait 30 seconds before turning the computer on again.
	CD drive is not connected properly.	Open the computer and check to see that the drive cable is connected properly.
	Proper driver is not loaded	Restart the system and make sure the CD drive drivers are loaded.

DVD drive		
Problem	Probable cause(s)	Possible solution
Cannot read DVD disk	DVD or CD is not properly seated in the drive.	Eject the DVD or CD, press down on the DVD or CD firmly to correctly seat it in the drive, then reload.
	DVD or CD has been loaded upside down.	Eject the disk, turn it over, then reload.
	DVD or CD disk may be dirty or scratched.	Load another DVD disk.
DVD does not work in the DOS mode.	Proper drivers are not loaded.	Restart the system and make sure the DVD drive drivers are loaded.
Cannot eject DVD disk.	The system is in the Sleep mode.	Press the Power button to bring the system back to full power, then eject the DVD.
	The DVD, diskette, or hard drive was active when attempting to eject the DVD.	Wait until all drive activity ends (the CD/hard drive light and diskette drive light will go out), then try to eject the DVD.
	DVD disk is not properly seated in the drive.	Turn off the computer, insert a straightened paper clip into the emergency eject hole, then push firmly. Slowly pull the tray out from the drive until the tray is fully extended, then remove the DVD disk.
DVD drive devices are not detected.	DVD drive is not connected properly.	Open the computer and check to see that the drive cable is connected properly.
	Incorrect driver is installed.	Ensure the correct driver is installed in <i>CONFIG.SYS</i> .
	Drive has been changed.	Make sure the jumper setting is set for "Slave."
	Proper drivers are not loaded.	Restart the system and make sure the DVD drive drivers are loaded.

### Resolving Hardware Conflicts

Hardware conflicts occur when two or more peripheral devices attempt to use the same hardware resources. I/O addresses, interrupts, and DMA channels are the most common hardware resources used by peripheral devices. For example, the factory default settings for the MIDI port audio interface are:

Base I/O address	220H
MIDI Port Base I/O address	330H
Interrupt	IRQ 5
8-bit DMA	Channel 1

When different peripheral devices use the same hardware resources at the same time, the devices and/or the system may not function properly. You can resolve hardware conflicts by ensuring that no devices are configured to use the same hardware resources. These resources can either be dipswitch or jumper settings on the peripheral card or software configurable resources. The Computer Setup selection of your Compaq Utilities allows you to view and modify the settings for the peripheral devices factory installed in your system. Refer to the *User's Guide* for the particular peripheral cards you wish to install for information on how to view and select their settings.

To resolve hardware conflicts:

- 1 Change the hardware settings of your audio card or other peripheral card in your system if the peripheral card is using any settings used by the factory-installed devices.
- 2 If you are unsure of the settings of the peripheral cards, you can isolate the source of the problem by temporarily removing all cards not manufactured by Compaq, or resetting the default settings and running Compaq Utilities. After that, add the cards back one at a time until the card that is causing the conflict is found.

Also see: [System](#)



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General System Specifications

Dimensions

Height	24.51 in
Length	20.13 in
Width	12.13 in

Weight lbs.

Input Requirements

Nominal Line Voltage	Information not Available
Range Line Voltage	Information not Available
Line Frequency	Information not Available
Input Current	Information not Available

Power (watts) Information not Available

Steady State	Information not Available
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Environmental Requirements

Temperature

Operating	50° to 95° F	10° to 35° C
Shipping	-4° to 140° F	-20° to 60° C

Humidity (noncondensing)

Operating	8% to 90%	8% to 90%
Nonoperating	5% to 95%	5% to 95%

Maximum Altitude (unpressurized)

Operating	10,000 ft	3048 m
Nonoperating	30,000 ft	9144 m

*\*This number will increase if more bays/slots are occupied.*

System Interrupts

Hardware IRQ

System Function

IRQ 0	System timer
IRQ 1	Standard 101/102-Key or Microsoft Natural Keyboard
IRQ 2	Programmable interrupt controller
IRQ 4	Communications Port (COM1)
IRQ 5	ESS SOLO-1 PCI AudioDrive
IRQ 5	SiS 7001 PCI to USB Open Host Controller
IRQ 6	Standard Floppy Disk Controller
IRQ 7	ECP Printer Port (LPT1)
IRQ 8	System CMOS/real time clock
IRQ 9	SCI IRQ used by ACPI bus
IRQ 11	ACPI IRQ Holder for PCI IRQ Steering
IRQ 11	Conexant PCI Modem Enumerator
IRQ 12	WheelMouse1 (PS/2)
IRQ 13	Numeric data processor
IRQ 14	Primary IDE controller (dual fifo)
IRQ 14	SiS 5513 Dual PCI IDE Controller
IRQ 15	Secondary IDE controller (dual fifo)

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System I/O

I/O Address (Hex)	System Function (Shipping Configuration)
000 - 00F	DMA Controller # 1
010 - 01F	DMA controller aliases
020	Interrupt Controller # 1 Control Register
021	Interrupt Controller #1 Mask Register
022 - 03D	Interrupt Controller Aliases
040 - 043	Counter/Timer
044 - 04F	Unused
050-053	Counter/Timer Aliases
053-05F	Unused
060	Keyboard Controller Data Register
061	Port B: SERR/IOCHK NMI, Speaker, Refresh
062 - 063	Unused
064	Keyboard Controller Command/Status Register
065 - 06F	Unused
070	NMI mask register (bit 7)
070	RTC/Configuration Memory Index Port (bit 6:0)
071	RTC/Configuration Memory Data Port
072	RTC Extended Index
073	RTC Extended Data
074-07F	Unused
080 - 08F	DMA Page Registers
090 - 091	Unused (alias of DMA page registers if PIIX4.4C.7=0)
092	Port 92 (fast reset and A20 gate)
093 - 09F	Unused (alias of DMA page registers if PIIX4.4C.7=0)
0A0	Interrupt Controller # 2 Control Register
0A1	Interrupt Controller # 2 Mask Register
0A2 - 0B1	Unused
0B2	APM Control
0B3	APM Status
0B4-0BF	Unused
0C0 - 0DF	DMA Controller # 2
0E2 - 0E3	DDC2 Registers
0E4 - 0E5	Master I2C Interface
0E7 - 0E9	Unused
0EA	Ultra I/O Index Register
0EB	Ultra I/O Data Register
0EC- 0EF	Modem Configuration
0F0 - 0F1	Coprocessor Busy Clear/Reset
0F2 - 0F8	Unused
0FA	Unused
0FC-0FF	Unused
100 - 101	Unused
102	Video Controller: POS 102 Register
103-12F	Unused
132 - 16F	Unused
170 - 177	Secondary IDE Controller (CD Drive)
178 - 1EF	Unused
1F0 - 1F7	Primary IDE Controller (Hard Drive)
1F8 - 200	Unused
201	Joystick (Decode in ES 1869)
202 - 21F	Unused
220 - 22F	Entertainment Audio
230 - 25F	Unused
260 - 263	Reserved - Modem use during POST
264 - 277	Unused
278 - 27F	Reserved - Parallel Port (LPT 2)
280 - 2E7	Unused
2E8 - 2EF	Reserved - Serial Port (COM 4)
2F0 - 2F7	Unused
2F8 - 2FF	Modem (COM 2)
330 - 331	MPU-401 (Decode in ES 1869)
332 - 36F	Unused
370 - 377	Reserved - Diskette Drive Controller 2 (370-371 used for SIO lock/unlock)
378 - 37F	Parallel Port (LPT 1)
380 - 387	Unused
388 - 38B	Audio FM Synthesizer - ES 1869
38C - 3B3	Unused
3B4 - 3B5	Video Controller: Monochrome
3B6 - 3B9	Unused
3BA	Video Controller: Monochrome
3BB	Unused
3BC -3BF	Reserved - Parallel Port
3C0 -3CF	Video Controller: VGA Registers
3D0 - 3D3	Unused
3D4 - 3D5	Video Controller: Color
3D6 - 3D9	Unused
3DA	Video Controller: Color
3DB - 3E7	Unused
3E8 - 3EF	Reserved: Serial Port (COM 3)
3F0 - 3F7	Diskette Controller (Primary)
3F6 - 3F7	IDE Interface (Hard disk and CD or DVD Drive)
3F8 - 3FF	Serial Port (COM 1)
4D0	Interrupt Controller 1 Edge/Level Control
4D1	Interrupt Controller 2 Edge/Level Control
4D2 - 677	Unused
678 - 67A	Parallel Port ECP Mode
778 - 77A	Parallel Port ECP Mode
CF8	PCI Configuration Index (32 bit I/O only)
CF9	Reset Control
CFC - CFF	PCI Configuration Data
46E8	Video Controller: Adapter Sleep

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System Memory

Size	Memory Address	System Function
640 K	00000000 - 0009FFFF	Base Memory
128 K	000A0000 - 000BFFFF	Video RAM
32 K	000C0000 - 000C7FFF	Video ROM
32 K	000C8000 - 000CFFFF	Legacy USB Device Header (when legacy support enabled)
64 K	000D000 - 000DFFFF	Unused
48 K	000E0000 - 000EBFFF	Unused (Not available for option cards. May use for UMBs.)
16 K	000EC000 - 000EFFFF	16-bit cacheable, shadowable, read-only memory. Not available for option cards.
64 K	000F0000 - 000FFFFF	System BIOS ROM shadow image
15 M	00100000 - 00FFFFFF	Standard Extended Memory
64 M	01000000 - 04FFFFFF	Rest of Extended Memory
60 M	05000000 - 07FFFFFF	Unused
512 K	08000000 - 0807FFFF	Standard Direct Video Memory
512 K	08080000 - 080FFFFF	Optional Direct Video Memory
1919 M	08100000 - 7FFFFFFF	Unused
16 M	80000000 - 80FFFFFF	Memory mapped I/O devices
~ 2000 M	81000000 - FDFDFFFF	Unused/System ROM aliases
128 K	FDFE0000 - FDFFFFFF	System ROM (alias)
~ 32 M	FE000000 - FFFDFFFF	Unused
128 K	FFFE0000 - FFFFFFFF	System BIOS ROM

System DMA

Hardware	System Function (Default)	Alternate Mappings
DMA 1	ESS SOLO-1 DOS Emulation	
DMA 2	Standard Diskette Drive Controller	
DMA 3	ECP Printer Port (LPT1)	
DMA 4	Direct memory access controller	

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CD Drive

Information for the 32x CD drive immediately follows.

32× CD Drive		
Dimensions	U. S.	Metric
Width	in	cm
Height	in	cm
Depth	in	cm
Weight	lb	kg
Modes Supported		
CD-ROM	Mode 1 and Mode 2	
CD-DA	Audio	
CD-XA	Mode 2, Form 1 and 2	
Photo CD	Multiple Session	
Video-CDI	Multiple Session	
CD-Plus/CD-Extra/CD Enhanced	Multiple Session	
CD-RW	Multiple Session	
Block Size		
CD-ROM	2048 bytes	
Mode 1 and Mode 2 Form 1 (XA)	2336 bytes	
CD-ROM Mode 2	2324 bytes	
CD-DA	2324 bytes	
CD-XA		
Center Hole	1.5 mm diameter	
Diameter	120 mm / 80mm	
Thickness	1.2 mm	
Track Pitch	1.6 μm	
Access Time		
Random	< 95 ms	
Full Stroke	< 190 ms	
Audio Output Level		
Line Out	0.7 Vrms ± 20%	
Headphone	0.6 Vrms ± 20%	
Cache Buffer	256 KB	
Data Transfer Rate		
	Mode 1	Mode 2
Sustained	4800 KB/sec	5475 KB/sec
	KB/sec (32×)	KB/sec (32×)
Burst	MB/sec	MB/sec
Startup Time	< 5 sec	
Stop Time	< 5 sec	

CD-RW Drive

Information for the CD-RW drive immediately follows.

CD-RW Drive		
Dimensions	U. S.	Metric
Width	in	cm
Height	in	cm
Depth	in	cm
Weight	lb	kg
Modes Supported		
CD-ROM	Mode 1 and Mode 2	
CD-DA	Audio	
CD-XA	Mode 2, Form 1 and 2	
Photo CD	Multiple Session	
Video-CDI	Multiple Session	
CD-Plus/CD-Extra/CD Enhanced	Multiple Session	
CD-RW	Multiple Session	
Block Size		
CD-ROM	2048 bytes	
Mode 1 and Mode 2 Form 1 (XA)	2336 bytes	
CD-ROM Mode 2	2324 bytes	
CD-DA	2324 bytes	
CD-XA		
Center Hole	1.5 mm diameter	
Diameter	120 mm / 80mm	
Thickness	1.2 mm	
Track Pitch	1.6 μm	
Access Time		
Random	< 95 ms	
Full Stroke	< 190 ms	
Audio Output Level		
Line Out	0.7 Vrms ± 20%	
Headphone	0.6 Vrms ± 20%	
Cache Buffer	256 KB	
Data Transfer Rate		
Sustained	Mode 1 4800 KB/sec	Mode 2 5475 KB/sec
Burst	KB/sec (32×) MB/sec	KB/sec (32×) MB/sec
Startup Time	< 5 sec	
Stop Time	< 5 sec	

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### SPECIFICATIONS

<a href="#">System</a>
<a href="#">Power supply</a>
<a href="#">Diskette drive</a>
<a href="#">Hard drives</a>
<b>Mouse</b>
<a href="#">CD or CD-RW drive</a>
<a href="#">ZIP drive</a>
<a href="#">Fax/modem</a>

Mouse		
Dimensions	<i>U. S.</i>	<i>Metric</i>
Height	1.34 in	3 mm
Length	4.45 in	113 mm
Width	2.36 in	60 mm
<b>Weight w/cable</b>	4.59 oz	130 g
<b>Base Resolution</b>	400 dpi	15.8 dpmm
<b>Tracking Speed</b> (maximum)	10 in/sec	25 cm/sec
<b>Temperature</b>		
Operating	0° C to + 40° C	32° F to 104° F
Non-Operating	-20° C to + 60° C	4° F to 140° F
<b>Lifetime</b>		
Mechanical	Exceeds 300 miles	Exceeds 483 km
Switch	Exceeds 1 million operations	Exceeds 1 million operations
<b>Relative Humidity</b>	10% to 90%, noncondensing at ambient.	



# Maintenance and Service Guide

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**ZIP drive**

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drive](#)

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[Fax/modem](#)

## SPECIFICATIONS

### Zip Drive

Total formatted capacity (bytes)	100,663,296
Sector size (bytes)	512
Total number of sectors	196,608
Number of reassignable spare sectors	252
Seek times (including settling), ms:	
Average	29
Track-to-track	5
Maximum	55
Average latency, ms	10
Motor speed, rpm	2941±5%
Motor start time, ms	3000
Track density, tpi	2118
Track width, µm	12
Transfer rate, kb/s:	
From diskette	790-1400
Buffer (maximum)	3300

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[CD or CD-RW  
drive](#)

## SPECIFICATIONS

Fax/Modem	
General Description	Lucent
Support	Supports K56flex and/or ITU-T V.90 14400bps send and receive fax modem with automatic fallback to 12000, 9600, 7200, 4800, and 2400bps.
	Support fax service Class 1 (EIA/TIA 578). Support V.80 video ready modem. Built-in DTE interface with speed up to 115.2kbps or 57.6kbps, parallel 16550a UART-compatible interface.  Power Management Registers to PCI Interface.
Data Mode	K56flex and/or ITU-T V.90 56kbits/s for highest Internet connection rates Ultrahigh compression throughput due to parallel access directly to the host PC. ITU-T V.34 extended rates 33600bps to 2400bps. V.32terbo, V.32bis and fallbacks. TIA/EIA 602 standard for AT command set. V.42 error correction (LAM and MNP). V.42bis and MNP Class 5 data compression.
Fax Mode	Fax modem send and receive rates up to 14400bps * V.17, V.29, V.27ter, and V.21 channel 2 * TIA/EIA 578 Class 1 FAX
Error Correction	ITU-T recommended V.42 error correction. V.42 error correction (LAM and MNP).

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SPECIFICATIONS

Quantum Hard Drives - 3.5"

4.3-GB    6.0-GB    8.0-GB    10-GB    13-GB

Formatted Capacity

Physical (MB)  
Logical (MB)

Drive Type

Data Transfer Rate

Head (Mbits/sec)  
Zones 1-14  
Zone 15

Interface (Mbytes/sec)

Typical Seek Time  
(including settling)

Track to Track (ms)  
Average (ms)  
Full Stroke (ms)

Disk Rotational Speed (RPM)

Data Cylinders

Physical  
Logical

Data Heads/ Cylinder

Physical  
Logical

Sectors per Track

Physical  
  
Logical

Buffer Size (kB)

Seagate Hard Drives - 3.5"

4.3-GB    6.0-GB    8.0-GB    10.0-GB    13.0-GB

Formatted Capacity

Physical (MB)  
Logical (MB)

Drive Type

Transfer Rate

Disk to Buffer (Mbits/sec)  
Interface (Mbytes/sec)  
DMA  
UDMA

Typical Seek Time  
(including settling)

Single Track (ms)  
Average (ms)  
Full Stroke (ms)

Disk Rotational  
Speed (RPM)

Data Cylinders

Physical  
Logical

Data Heads/  
Cylinder

Physical  
Logical

Sectors per Track

Physical  
  
Logical

Buffer Size (kB)

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	Power Supply		
	U. S.		
	Input Specifications		
	Nominal Line Voltage	115 to 230 VAC	
	Range Input Line	90 to 180 VAC	
	Frequency Range	50± 3 to 60± 3 Hz	
	Input Current	115V      3.00 AMPS	
	Input Current	230V      1.50 AMPS	
	Output Power	110 Watts	
	Inrush Current	80 A at 132 VAC (cold start)	
	Holdup Time	16 ms from zero crossing at 120 VAC	
Environment		Temperature Range	
Operating		10 to +50 ° C	
Storage		-20 to +60 ° C	
Humidity		Non Condensing	
Operating		20% to 90% RH	
Storage		5% to 95% RH	
Safety Standard		UL 1950; CSA 22.2 #234, level 3; TUV EN 60950; NEMKO CB	
		Note: Leakage current should be less than 3.5mA.	
EMI Requirements		FCC part 15 subpart J class B at system load. CISPR22 CLASS B	

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System board

Hard drives

CD drive

### JUMPER & SWITCH INFORMATION

#### System Board Connectors

Models : 5423, 5440, and 5443

Function	Description
Keyboard	Miniature 6-pin
Mouse	Miniature 6-pin
Parallel port	DSUB 25-pin
Serial port	DSUB 15-pin
Video	15-pin VGA
Microphone in	Mini stereo
Speaker out/Line out	Mini stereo
(3) DIMM sockets	168-pin DIMM
PCI slots	32-bit PCI connector
ISA slots	16-bit ISA connector
Line in	Socket 7
Clock multiplier	4-pin switch
Game Port	15-pin 2mm connector
Sleep button & LEDs	connector
Battery socket	2-pin socket
CD-ROM audio	4-pin header, key 2
IDE drives	40-pin headers, key 20
Diskette drive	34-pin header
CPU core frequency/Voltage ratio	8-pin switch
Fan with active heatsink	3-pin header
Power supply	20-pin header
USB	2 port

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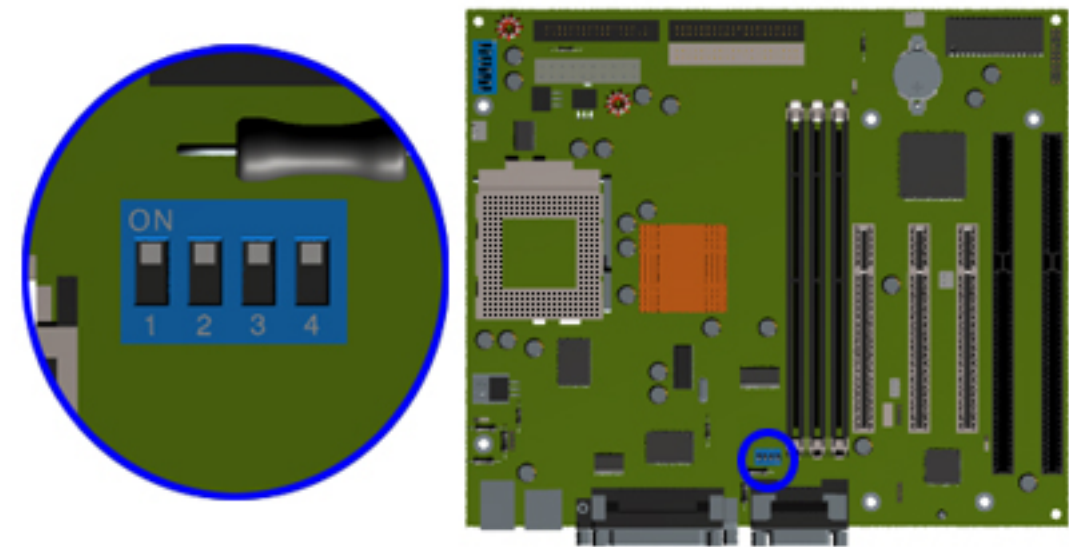
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CPU Jumper Setting Table (Switch 1)

### JUMPER & SWITCH INFORMATION



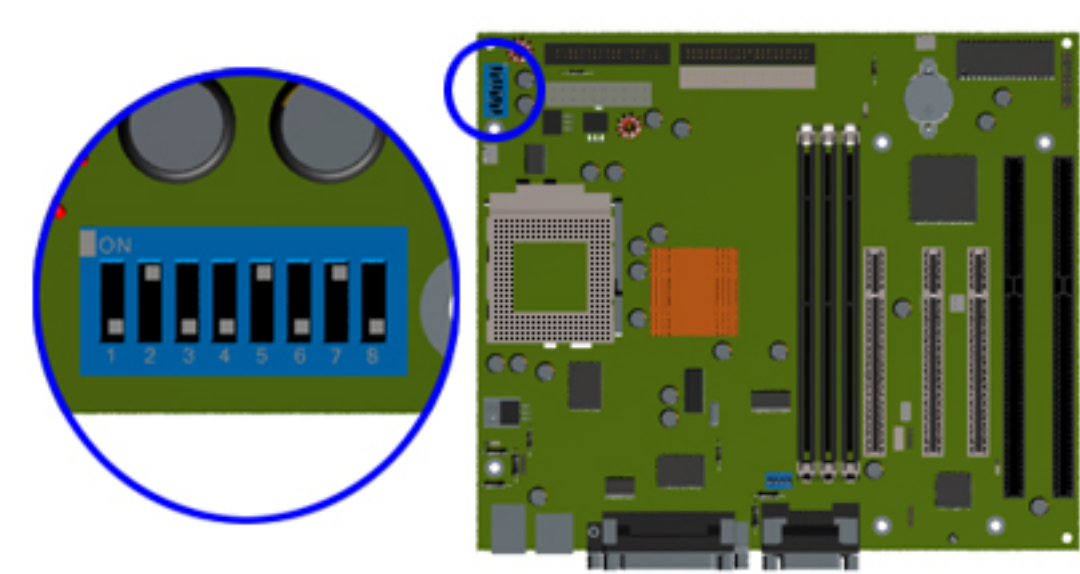
CPU	SDRAM	PCI	1	2	3	4
66.8	66.8	33.4	on	on	on	off
75	75	30	off	on	on	off
83.3	83.3	33.3	on	off	on	off
95	95	31.7	off	off	on	off
100	100	33.4	on	on	off	off
112	112	37.3	off	on	off	off
124	124	31	on	off	off	off
133	133	33.3	off	off	off	off
90	90	30	on	on	on	on
83	55.5	33.3	off	on	on	on
95	63.3	31.7	on	off	on	on
66.8	100	33.3	off	off	on	on
105	105	35	on	on	off	on
112	74.7	37.3	off	on	off	on
124	82.7	31	on	off	off	on
133.3	88.9	33.3	off	off	off	on



**CAUTION:** It is strongly recommended that the system speed is set according to the hardware configuration: CPU, SDRAM, Cards, etc.



# JUMPER & SWITCH INFORMATION



CPU Jumper Setting Table (Switch 2)

	1	2	3
X1.5	off	off	off
X2	on	off	off
X2.5	on	on	off
X3	off	on	off
X3.5	off	off	off
X4	on	off	on
X4.5	on	on	on
X5	off	on	on
X5.5	off	off	on

CPU Jumper Setting Table (Switch 2)

	4	5	6	7	8
1.3V	on	on	on	on	off
1.4V	off	on	off	off	on
1.5V	off	off	on	off	on
1.6V	off	on	on	off	on
1.7V	off	off	off	on	on
1.8V	off	on	off	on	on
1.9V	off	off	on	on	on
2.0V	off	on	on	on	on
2.1V	on	off	off	off	off
2.2V	off	on	off	off	off
2.3V	on	on	off	off	off
2.4V	off	off	on	off	off
2.5V	on	off	on	off	off
2.6V	off	on	on	off	off
2.7V	on	on	on	off	off
2.8V	off	off	off	on	off
2.9V	on	off	off	on	off
3.0V	off	on	off	on	off
3.1V	on	on	off	on	off
3.2V	off	off	on	on	off
3.3V	on	off	on	on	off
3.4V	off	on	on	on	off
3.5V	on	on	on	on	off

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**Hard drives**

[CD drive](#)

## JUMPER & SWITCH INFORMATION

### *Hard Drives*

Compaq Computer Corporation uses IDE hard disk drives that conform to two different device 0/device 1 implementations. These are Conner mode and ATA-compatible mode. These two modes are incompatible with one another.

**IMPORTANT:**

**Seagate** jumper settings are shown on top of the hard drive.

This link is for **Quantum** hard drive jumper settings

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**CD drive**

## JUMPER & SWITCH INFORMATION

### *32x CD Drive*

Information not Available

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## **SPECIFICATIONS - INDEX PAGE**

This section provides physical, environmental, and performance specifications for Compaq 5400 Series Personal Computers.

**CD or CD-  
RW drive**

**Diskette  
drive**

**Fax-  
modem**

**Hard drive**

**Mouse**

**Power  
supply**

**ZIP drive**

**System**

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The computer [serial number](#) should be provided to Compaq whenever requesting information or ordering spare parts.

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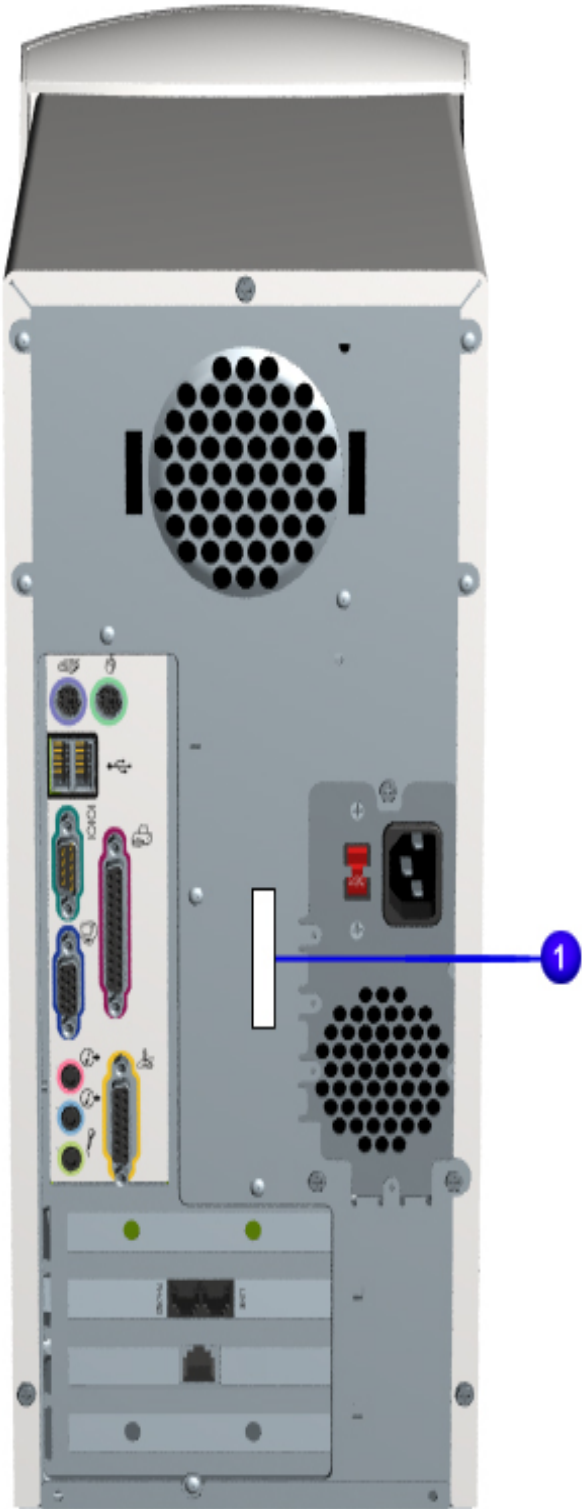
[System Board and Components](#)

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## REMOVAL & REPLACEMENT

### Serial Number

The computer serial number should be provided to Compaq whenever requesting information or ordering spare parts. The serial number is located on front (bottom of bezel) and rear of the computer.



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## REMOVAL & REPLACEMENT

### Front Bezel



### Removal

- 1 Perform the [preparation procedures](#).
- 2 Remove screw, release tabs, and remove the front bezel from the computer.

### Replacement

To replace the front bezel, reverse this procedures.

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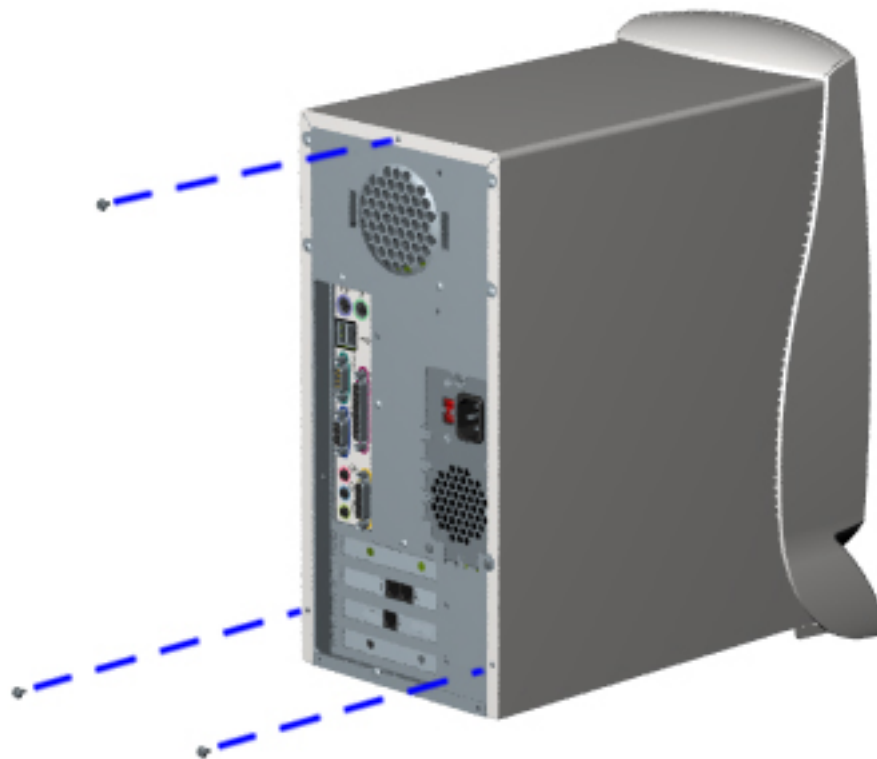
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## **REMOVAL & REPLACEMENT**

### ***Chassis Cover***



### **Removal**

- 1** Perform the [preparation procedures](#).
- 2** Remove the three screws from the back of the computer.

### ***Next Step***



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#### **Chassis Cover**

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## REMOVAL & REPLACEMENT

### *Chassis Cover*



#### **Removal**

- 3 Grasp each side of the back of the computer cover, slide the cover back, and lift up off the chassis.

#### **Replacement**

To replace the chassis, reverse this procedure.

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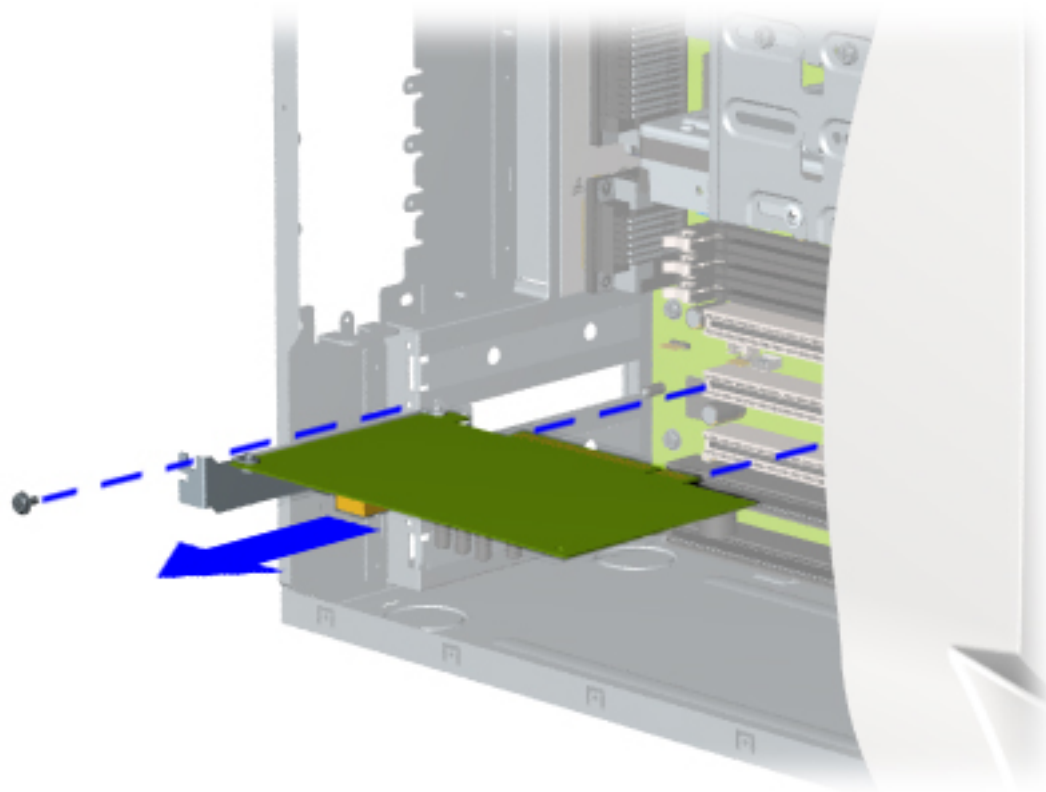
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## REMOVAL & REPLACEMENT

### *Fax/modem*



### **Removal**

- 1 [Perform preparation procedures.](#)
- 2 [Remove the chassis cover.](#)
- 3 Remove screw securing the fax/modem to the chassis and pull the fax/modem out of the slot.

### **Replacement**

To replace the fax/modem, reverse this procedures.

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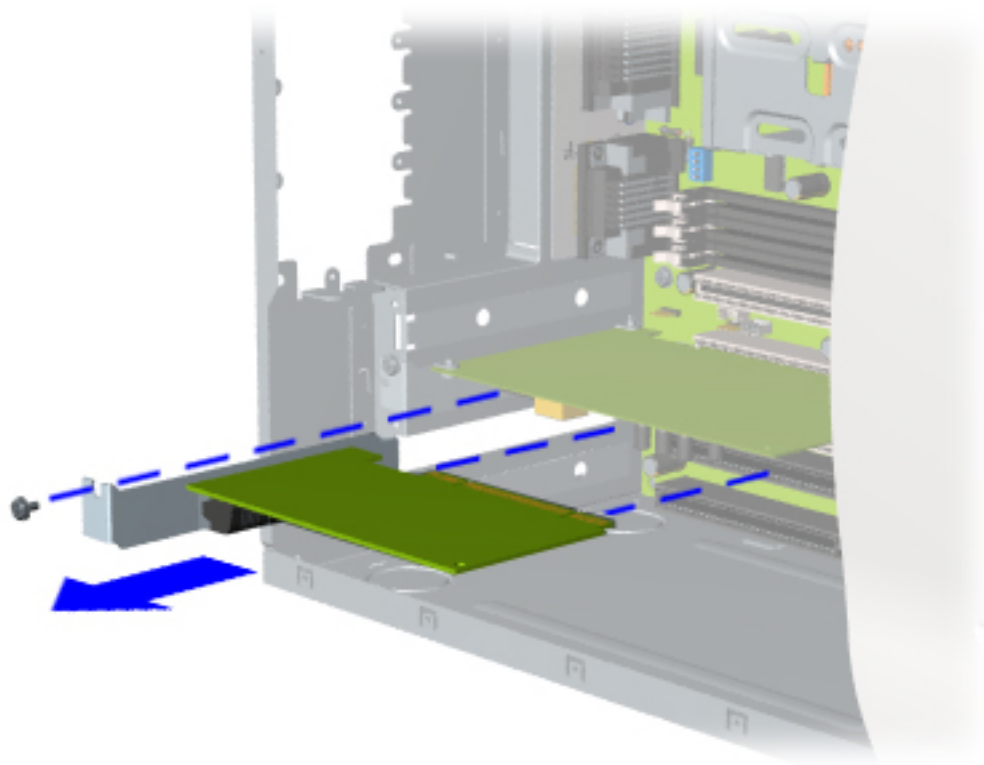
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## REMOVAL & REPLACEMENT

### *Network Interface Card*



#### Removal

- 1 [Perform preparation procedures.](#)
- 2 [Remove the chassis cover.](#)
- 3 Remove screw securing the Network Interface Card to the chassis and pull the Network Interface Card out of the slot.

#### Replacement

To replace the Network Interface Card, reverse this procedures.

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## REMOVAL & REPLACEMENT

*Mass Storage Devices - Index Page*

- [1 CD or CD-RW Drive](#)**
- [2 13.0-GB , 10.0-GB , 8.0-GB , 6.0-GB , and  
4.3-GB Hard Drive](#)**
- [3 Diskette Drive](#)**
- [4 ZIP Drive](#)**

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**CD Drive**

Hard Drive

3.5" Diskette  
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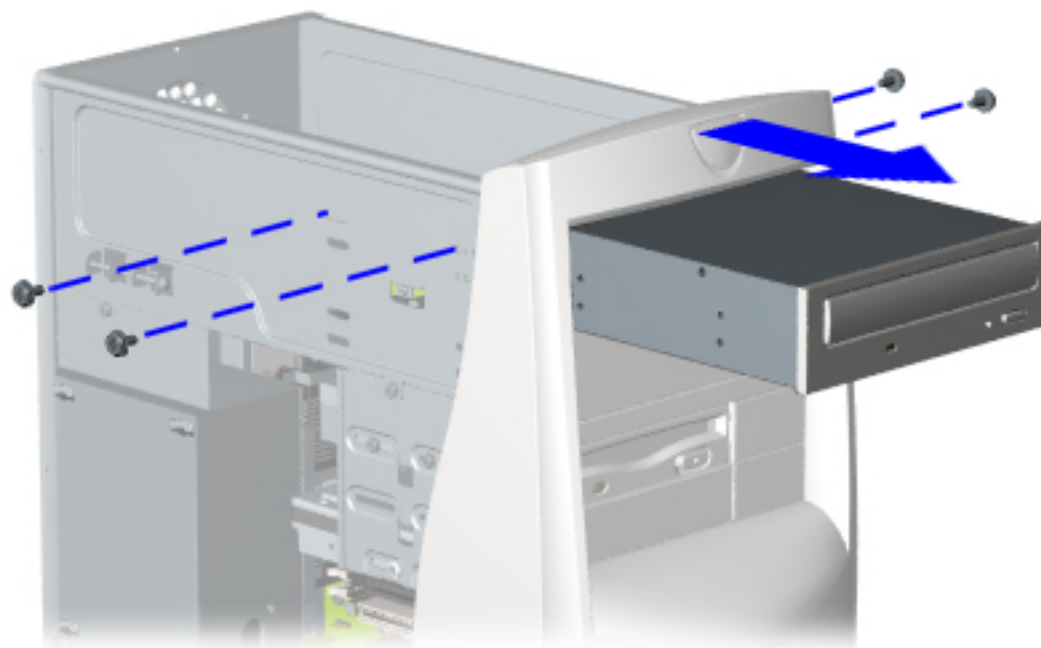
## REMOVAL & REPLACEMENT

### *Mass Storage Devices*

#### CD or CD-RW Drive

**NOTE:** Click [here](#) to see how to remove a CD that has jammed in the drive.

To remove the CD or CD-RW drive, complete the following steps:



#### **Removal**

- 1** [Perform preparation procedures.](#)
- 2** [Remove the chassis cover.](#)
- 3** Disconnect the data, signal, and power cable from the CD or CD-RW drive.
- 4** Remove two screws from each side of the CD or CD-RW drive.

[\*NEXT STEP\*](#)

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## REMOVAL & REPLACEMENT

### *Mass Storage Devices*

#### **Removing a jammed CD from the drive.**

Insert a straightened paper clip into the manual eject hole and push firmly.

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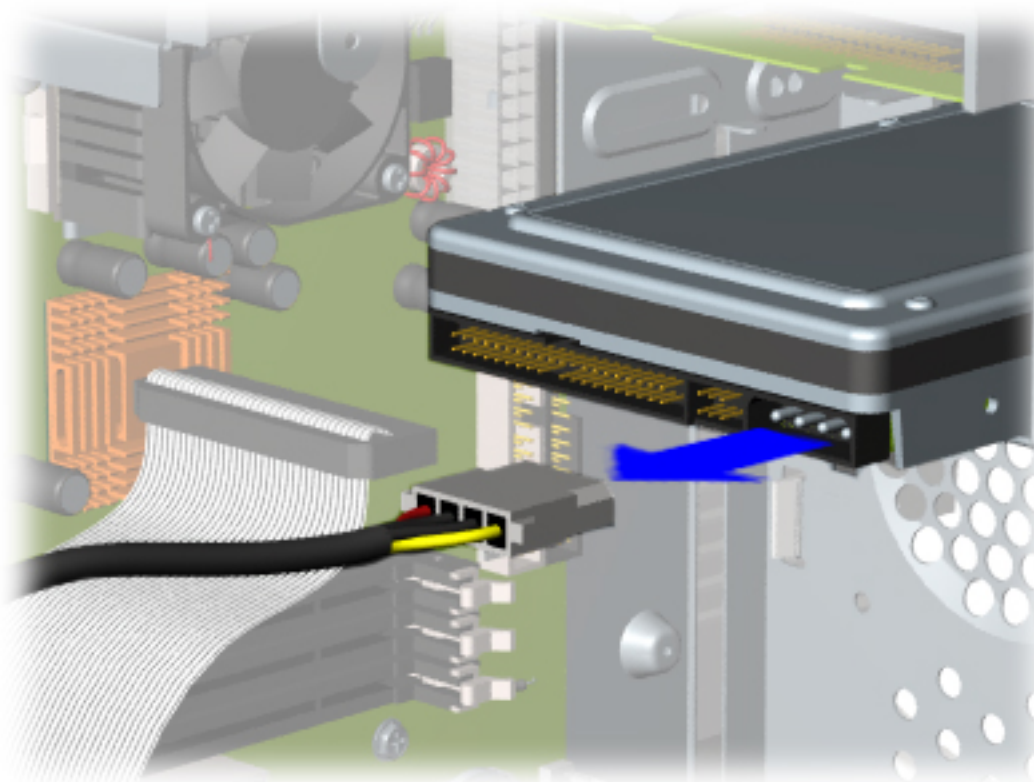
[3.5" Diskette Drive](#)

[Mass storage devices index page](#)

## REMOVAL & REPLACEMENT

### *Mass Storage Devices*

**13.0-MB, 10.0-MB, 8.0-MB, 6.0-MB, and 4.3-GB Hard Drive**



### **Removal**

- 1 [Perform preparation procedures.](#)
- 2 [Remove the chassis cover.](#)
- 3 [Disconnect all cables from the diskette drive.](#)
- 4 Disconnect the power and data cable from the hard drive.

[NEXT STEP](#)

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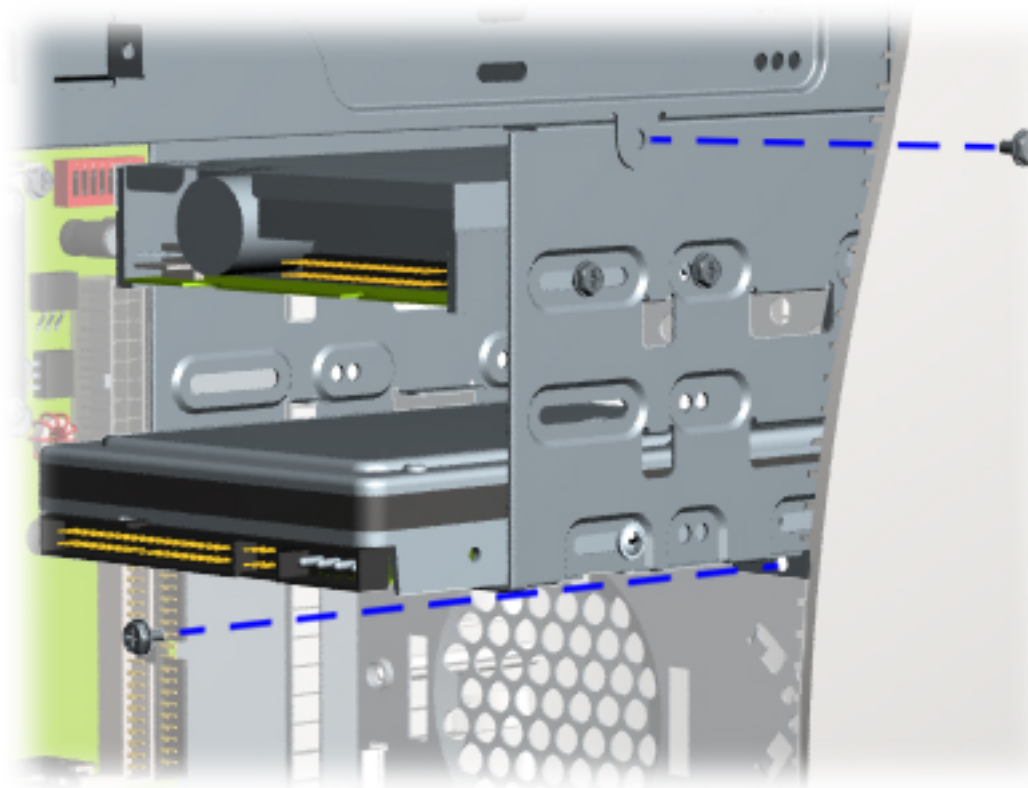
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## REMOVAL & REPLACEMENT

### *Mass Storage Devices*

**13.0-GB, 10.0-GB, 8.0-GB, 6.0-GB, and 4.3-GB Hard Drive**



### **Removal**

- 5 Remove two screws located at the top (side) and front of the drive cage. Slide the drive cage back from the slot in the chassis.

*[NEXT STEP](#)*



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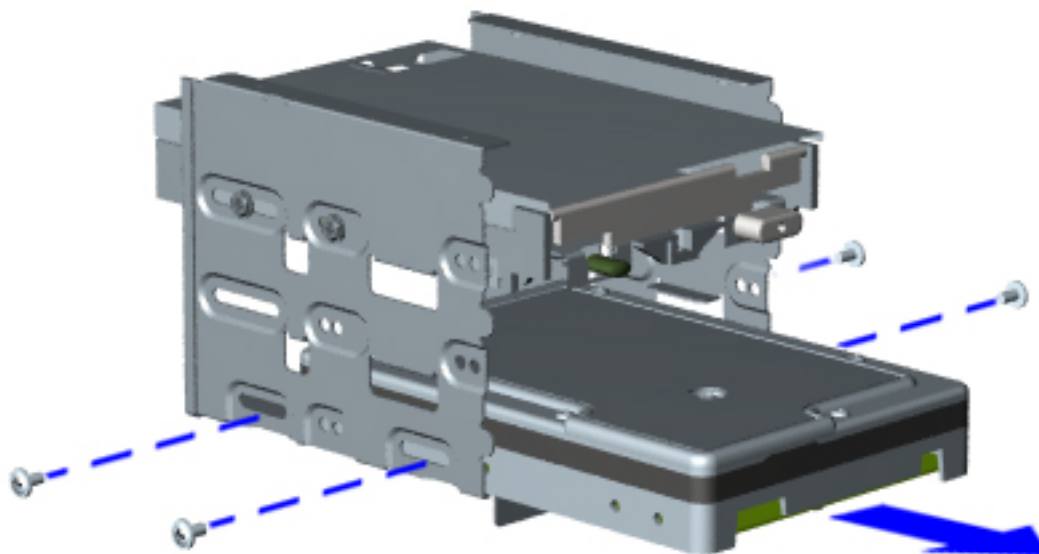
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## REMOVAL & REPLACEMENT

### *Mass Storage Devices*

**13.0-GB, 10.0-GB, 8.0-GB, 6.0-GB, and 4.3-GB Hard Drive**



### Removal

- 6 Remove two screws from each side of the drive cage and remove the hard drive.

To replace the hard drive reverse the previous procedure.

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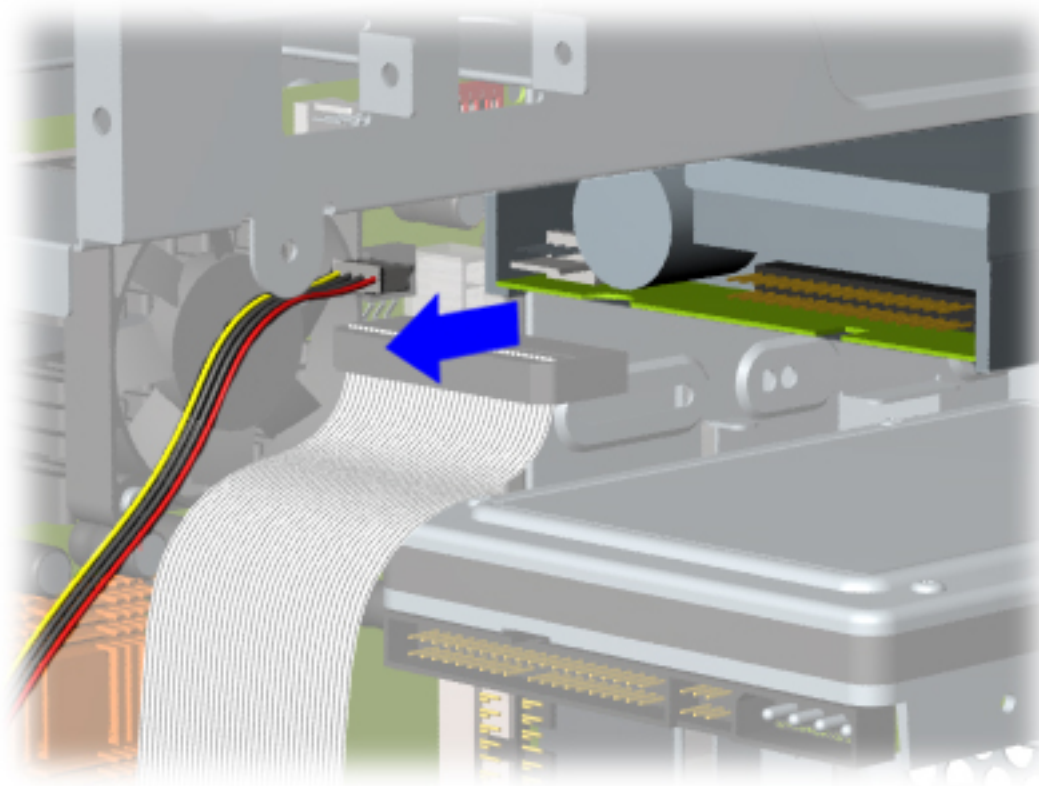
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## REMOVAL & REPLACEMENT

### *Mass Storage Devices*

#### **Diskette Drive**



To remove the diskette drive, complete the following steps:

#### **Removal**

- 1** [Perform the preparation procedures.](#)
- 2** [Remove the chassis cover.](#)
- 3** [Disconnect all cables to the hard drive.](#)
- 4** Disconnect power and data cable from the diskette drive.

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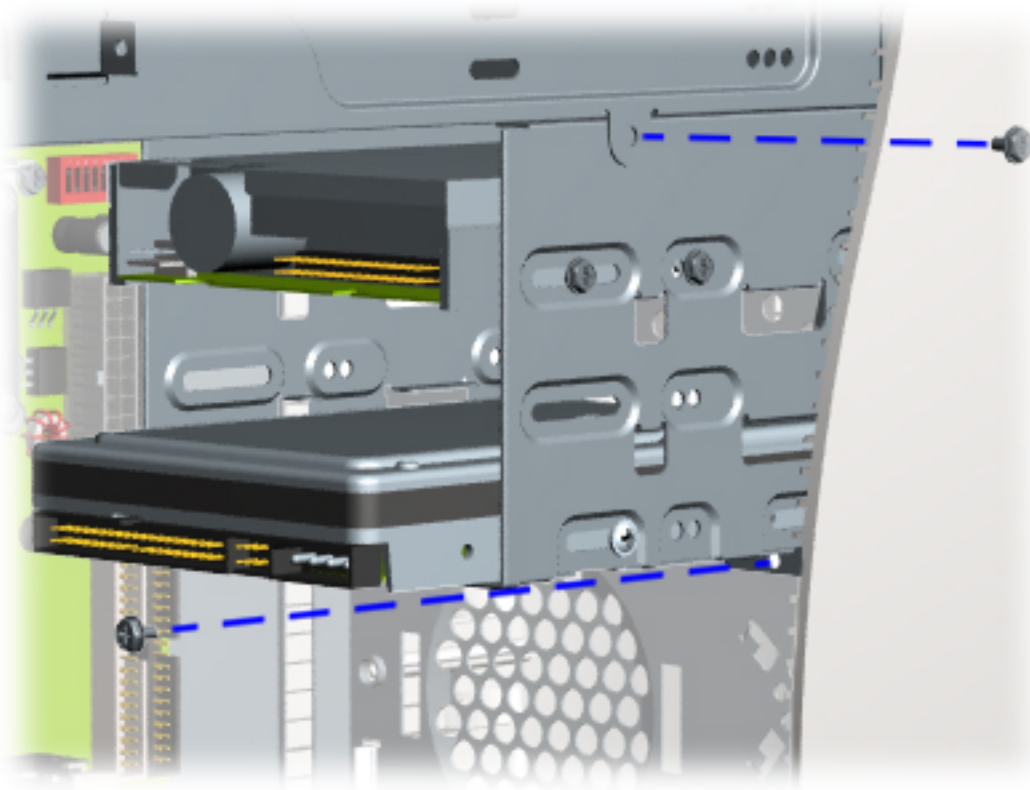
## REMOVAL & REPLACEMENT

### *Mass Storage Devices*

#### **Diskette Drive, continued**

- 5 Remove two screws securing diskette/hard drive cage to the chassis and remove the drive cage.

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## REMOVAL & REPLACEMENT

### *Mass Storage Devices*

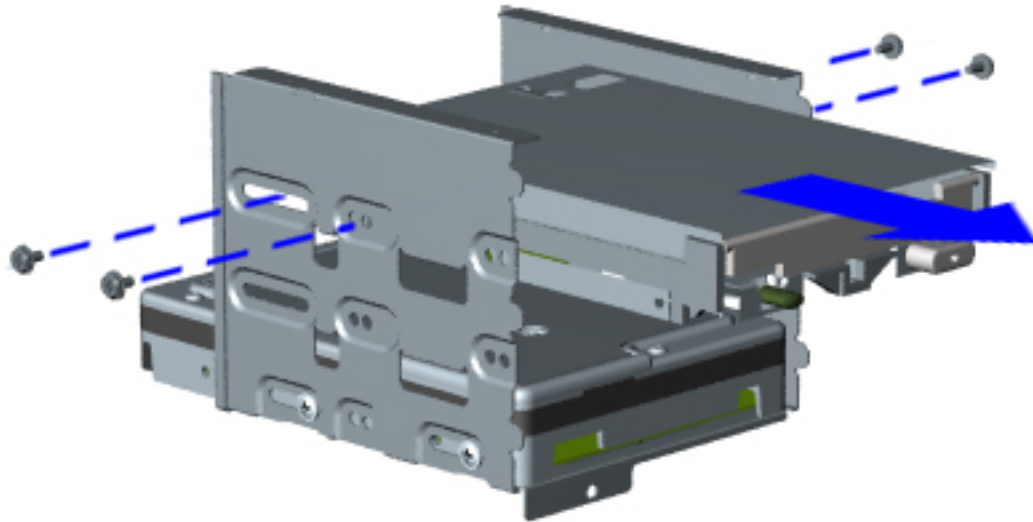
#### **Diskette Drive, continued**

- 6** Remove two screws from each side of the drive cage and remove the diskette drive from the cage.

#### **Replacement**

To replace the diskette drive, reverse this procedure.

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**Zip drive**

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## REMOVAL & REPLACEMENT

### *Mass Storage Devices*

#### **Zip Drive**

EM2.jpg

#### **Removal**

- 1**    [Perform preparation procedures.](#)
- 2**    [Remove the chassis cover.](#)
- 3**    Disconnect the ZIP drive cable from the ZIP drive.

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## REMOVAL & REPLACEMENT

### *Mass Storage Devices*

#### **Zip Drive, continued**

- 4** Remove the four screws from the sides of the ZIP drive.
- 5** Remove the ZIP drive from the front of the drive cage assembly.

[Return to index page.](#) To replace the Zip drive, reverse the removal procedures.



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### REMOVAL & REPLACEMENT

#### *Electrostatic Discharge (Return to Service Considerations)*

A sudden discharge of static electricity from a finger or other conductor can destroy static-sensitive devices or microcircuitry. Often the spark is neither felt nor heard, but damage occurs. An electronic device exposed to electrostatic discharge (ESD) may not be affected at all and will work perfectly throughout a normal cycle. Or it may function normally for a while, then degrade in the internal layers, reducing its life expectancy.

Networks built into many integrated circuits provide some protection, but in many cases, the discharge contains enough power to alter device parameters or melt silicon junctions.

#### Generating Static

The table below shows the different amounts of static electricity generated by different activities .

Event	Relative Humidity		
	10%	40%	55%
Walking across carpet	35,000 V	15,000 V	7,500 V
Walking across vinyl floor	12,000 V	5,000 V	3,000 V
Motions of bench worker	6,000 V	800 V	400 V
Removing DIPS from plastic tubes	2,000 V	700 V	400 V
Removing DIPS from vinyl trays	11,500 V	4,000 V	2,000 V
Removing DIPS from Styrofoam	14,500 V	5,000 V	3,500 V
Removing bubble pack from PCBs	26,000 V	20,000 V	7,000 V
Packing PCBs in foam-lined box	21,000 V	11,000 V	5,000 V

**NOTE:** 700 volts can degrade a product!

#### Preventing Electrostatic Damage to Equipment

Many electronic components are sensitive to ESD. Circuitry design and structure determine the degree of sensitivity. The following proper packaging and grounding precautions are necessary to prevent damage:

- Protect all electrostatic parts and assemblies with conductive or approved containers or packaging.
- Keep electrostatic sensitive parts in their containers until they arrive at static-free stations.
- Place items on a grounded surface before removing them from their container.
- Always be properly grounded when touching a sensitive component or assembly.
- Place reusable electrostatic-sensitive parts from assemblies in protective packaging or conductive foam.

Use transporters and conveyors made of antistatic belts and metal roller bushings. Mechanized equipment used for moving materials must be wired to ground and proper materials selected to avoid static charging. When grounding is not possible, use an ionizer to dissipate electric charges.

#### Preventing Damage to Drives

To prevent static damage to hard drives, use the following precautions:

- Handle drives gently, using static-guarding techniques.
- Store drives in the original shipping containers.
- Avoid dropping drives from any height onto any surface.
- Handle drives on surfaces that have at least one inch of shock-proof foam.
- Always place drives PCB assembly side down on the foam.

#### Grounding Methods

The method for grounding must include a wrist strap or a foot strap at a grounded workstation. When seated, wear a wrist strap connected to a grounded system. When standing, use footstraps and a grounded floor mat.

Static-Shielding Protection Levels			
Method	Antistatic Plastic	Carbon-Loaded Plastic	Metallized Laminate
Voltages	1,500	7,500	15,000

#### Grounding Workstations

To prevent static damage at the workstation, use the following precautions:

- Cover the workstation with approved static-dissipative material. Provide a wrist strap connected to the work surface and properly grounded tools and equipment.
- Use static-dissipative mats, heel straps, or air ionizers to give added protection.
- Handle electrostatic sensitive components, parts, and assemblies by the case or PCB laminate. Handle them only at static-free workstations.
- Avoid contact with pins, leads, or circuitry.
- Turn off power and input signals before inserting and removing connectors or test equipment.
- Use fixtures made of static-safe materials when fixtures must directly contact dissipative surfaces.
- Keep work area free of nonconductive materials such as ordinary plastic assembly aids and Styrofoam.
- Use field service tools, such as cutters, screwdrivers, and vacuums, that are conductive.
- Use a portable field service kit with a static dissipative vinyl pouch that folds out of a work mat. Also use a wrist strap and a ground cord for the work surface. Ground the cord to the chassis of the equipment undergoing test or repair.

#### Grounding Equipment

Use the following equipment to prevent static electricity damage to the equipment:

*Wrist Straps* are flexible straps with a minimum of 1 megohm ±10% resistance to the ground cords. To provide proper ground, a strap must be worn snug against the skin. On grounded mats without banana-plug connectors, connect a wrist strap with alligator clips.

*Heelstraps/Toestrap*s/*Bootstraps* can be used at standing workstations and are compatible with most types of boots and shoes. On conductive floors or dissipative floor mats, use them on both feet with a minimum of 1 megohm resistance between operator and ground. To be effective, the conductive strips must be worn in contact with the skin.

#### Recommended Materials and Equipment

Other materials and equipment that are recommended for use in preventing static electricity include:

- Antistatic tape
- Antistatic smocks, aprons, or sleeve protectors
- Conductive bins, and other assembly or soldering aids
- Conductive foam
- Conductive tabletop workstations with ground cord of 1 megohm of resistance
- Static dissipative table or floor mats with hard tie to ground
- Field service kits
- Static awareness labels
- Wrist straps and footwear straps providing 1 megohm ±10% resistance
- Material handling packages
- Conductive plastic bags
- Conductive plastic tubes
- Conductive tote boxes
- Metal tote boxes
- Opaque shielding bags
- Transparent metallized shielding bags
- Transparent shielding tubes

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## REMOVAL & REPLACEMENT

### *Service Considerations*

### Tool Requirements

- Phillips screwdriver
- Needle-nose pliers
- Flathead screwdriver
- Compaq Utilities software

### Screws

The screws used in these products are not interchangeable. If an incorrect screw is used during the reassembly process, it could cause damage to the unit. Compaq strongly recommends that all screws removed during the disassembly process be kept with the part that was removed, then returned to their proper locations.

**IMPORTANT:**

As each subassembly is removed from the computer, it should be placed away from the work area to prevent damage.

### Cables and Connectors

Most cables used throughout the unit are *ribbon cables*. These must be handled with extreme care to avoid damage. Apply only the tension required to seat or unseat the cables during insertion or removal from the connector. Handle cables by the connector whenever possible. In all cases, avoid bending, twisting, or tearing the cables, and ensure that they are placed in such a way that they cannot be caught or snagged by parts being removed or replaced.

**CAUTION:** When servicing these computers, ensure that cables are placed in their proper location during the reassembly process. Improper cable placement can cause severe damage to the unit.

### *Ribbon Cable Positions*

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## REMOVAL & REPLACEMENT

### *Preparation for Disassembly*

To prepare the computer for removal and replacement procedures, complete the following steps:

- 1 Remove any diskette, compact disc, or tape from the computer.
- 2 Turn off the computer and any peripheral devices that are connected to the computer.



**CAUTION:** The computer power switch should be turned off before you disconnect any cables.

- 3 Disconnect the power cord from the electrical outlet, and then from the computer.
- 4 Disconnect all peripheral device cables from the computer.

**IMPORTANT:**

During disassembly, label each cable as you remove it. Be sure to note its position and routing.

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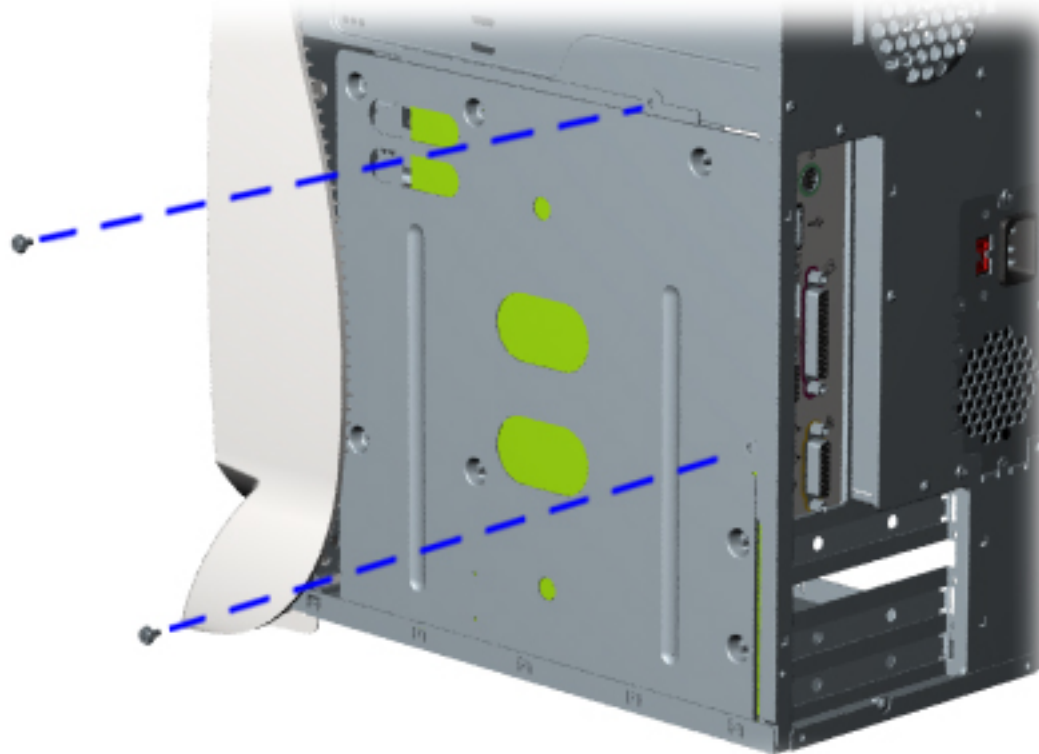
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## REMOVAL & REPLACEMENT

### *System Board*



### **Removal**

- 1** [Perform preparation procedures.](#)
- 2** [Remove the chassis cover.](#)
- 3** [Remove the fax/modem.](#)
- 4** Remove two screws securing the system board.
- 5** [Disconnect the power supply cable](#) from the system board.
- 6** [Disconnect the mass storage data cables](#) from the system board.

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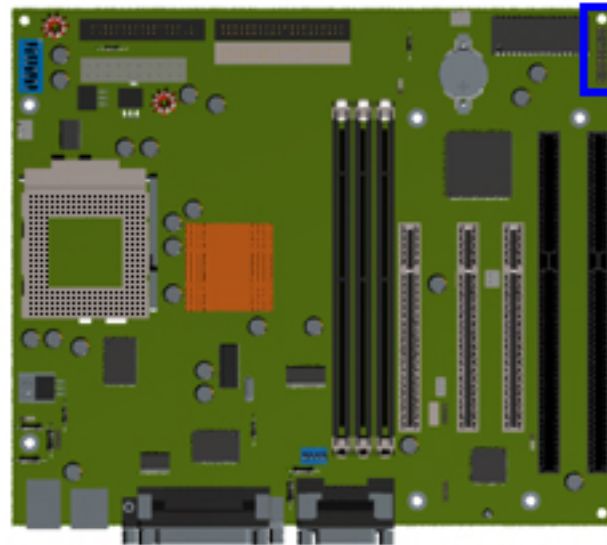
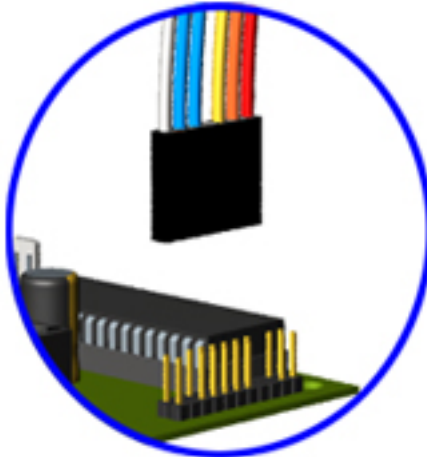
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## REMOVAL & REPLACEMENT

### *System Board*



### **Removal**

- 7 Disconnect the Button board cable from the system board.

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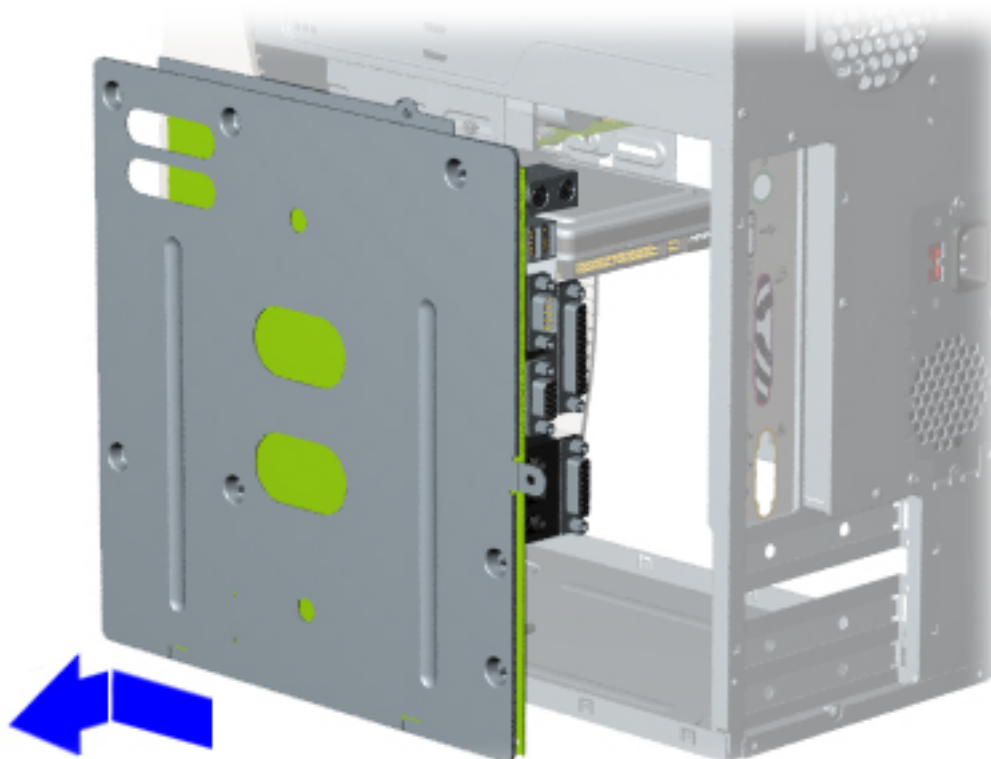
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## REMOVAL & REPLACEMENT

### *System Board*



#### **Removal**

- 8** Slide the system board toward the front, tilt outward, and remove from the chassis.

To replace the system board reverse the previous procedure.

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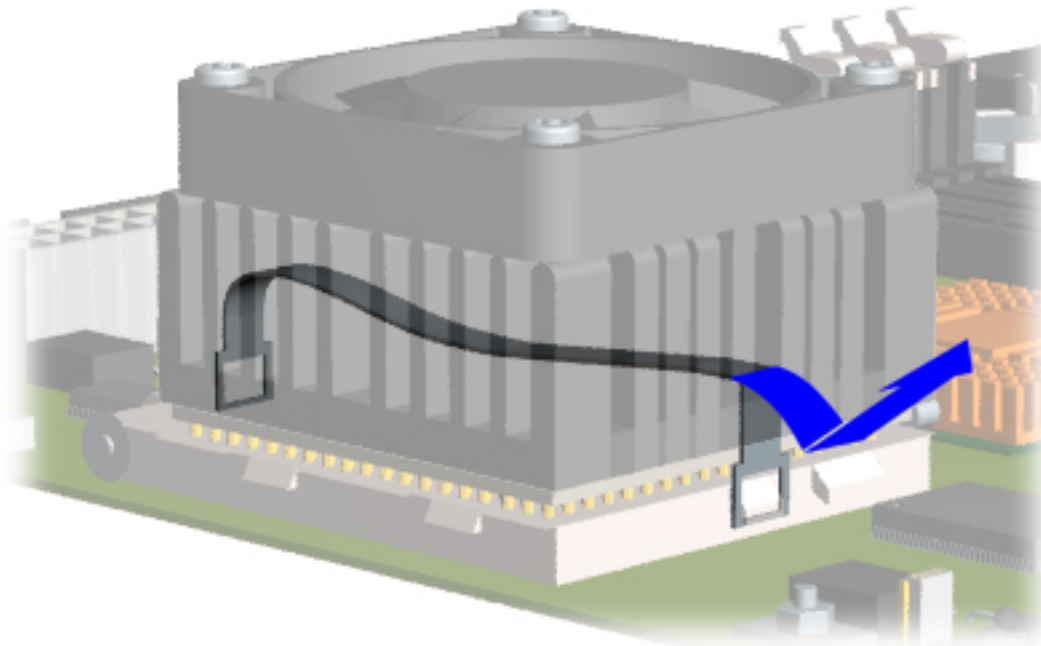
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## REMOVAL & REPLACEMENT

### *Fan Assembly with Active Heatsink*



#### Removal

- 1 [Perform preparation procedures.](#)
- 2 [Remove the chassis cover.](#)
- 3 [Remove the fax/modem.](#)
- 4 [Remove the system board.](#)
- 5 Lay the system board down on a flat surface, gently push down to release the clip and lift the clip up.

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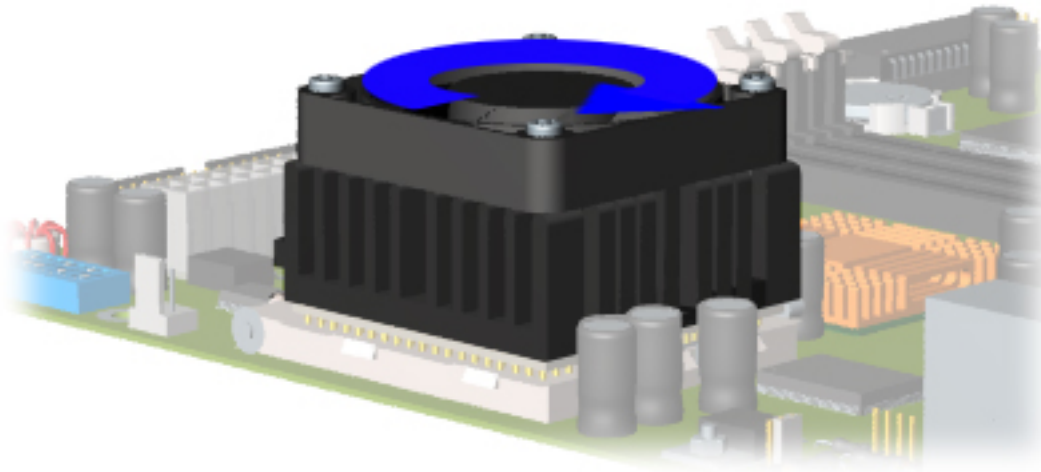
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## REMOVAL & REPLACEMENT

### *Fan Assembly with Active Heatsink*



#### **Removal**

- 6 Grasp the fan assembly and twist (clockwise) to remove from the heatsink.

#### **Replacement**

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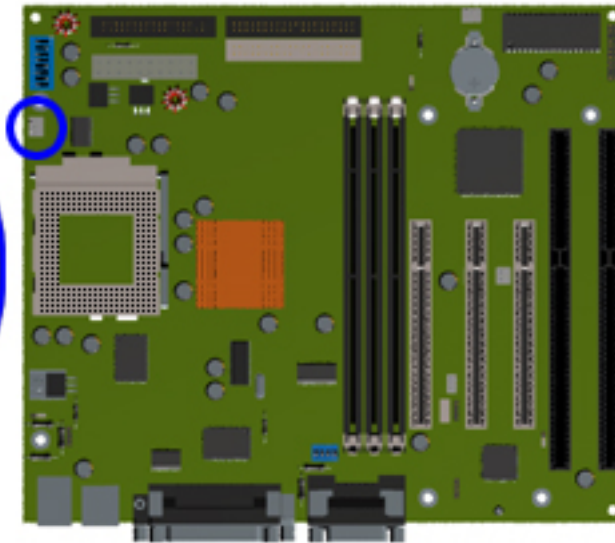
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## REMOVAL & REPLACEMENT

### *Fan Assembly with Active Heatsink*



### Removal

**7** Disconnect the fan cable from the system board and remove the fan assembly with active heat sink.

### Replacement

To replace the fan assembly with active heat sink reverse the previous procedure.

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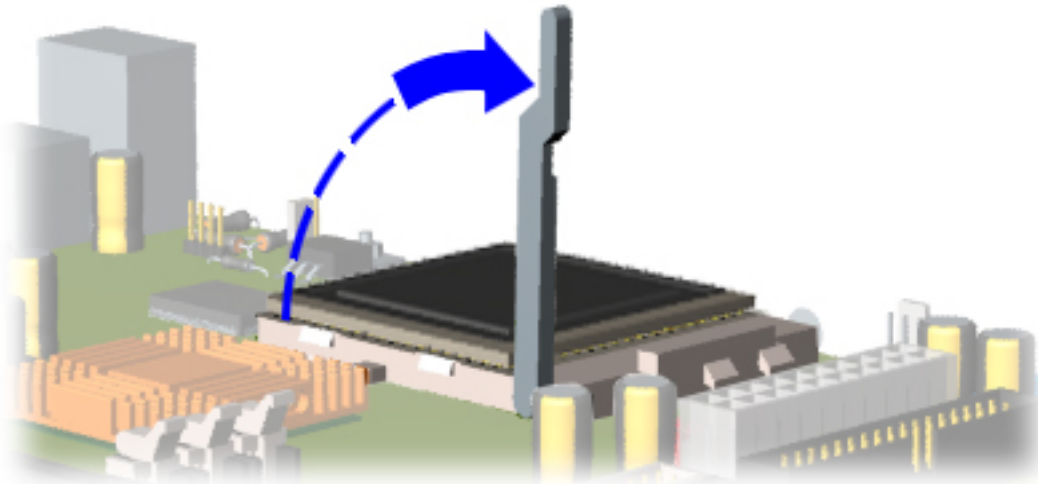
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## REMOVAL & REPLACEMENT

### *System Board Components*

#### Processor



#### Removal

- 1 [Perform preparation procedures.](#)
- 2 [Remove the chassis cover.](#)
- 3 [Remove the fax/modem.](#)
- 4 [Remove the system board.](#)
- 5 [Remove the fan assembly with heat sink.](#)
- 6 Lift up the ZIF socket handle.  
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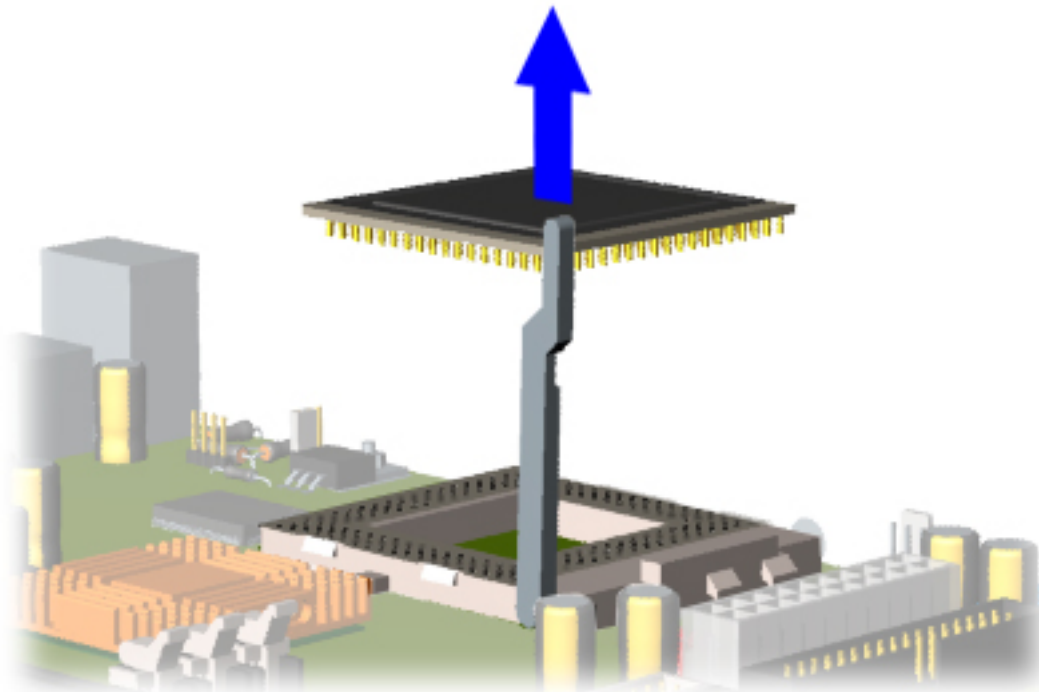
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## REMOVAL & REPLACEMENT

### *System Board Components*

#### Processor



#### Removal

**7** Remove the processor from the socket.

#### Replacement

To replace the processor, reverse the previous procedure.

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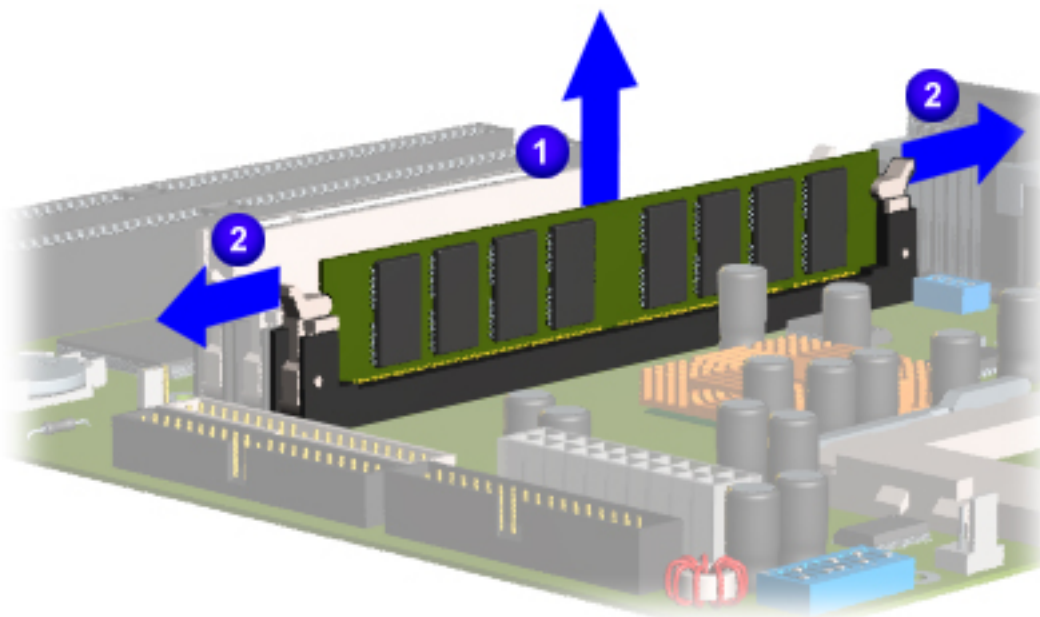
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## REMOVAL & REPLACEMENT

### *System Board Components*

#### Memory Module (DIMM)



- 1** [Perform preparation procedures.](#)
- 2** [Remove the chassis cover.](#)
- 3** [Remove the fax/modem.](#)
- 4** [Remove the system board.](#)
- 5** Pull out on the  retention clips of the socket and  unplug the DIMM from the system board .

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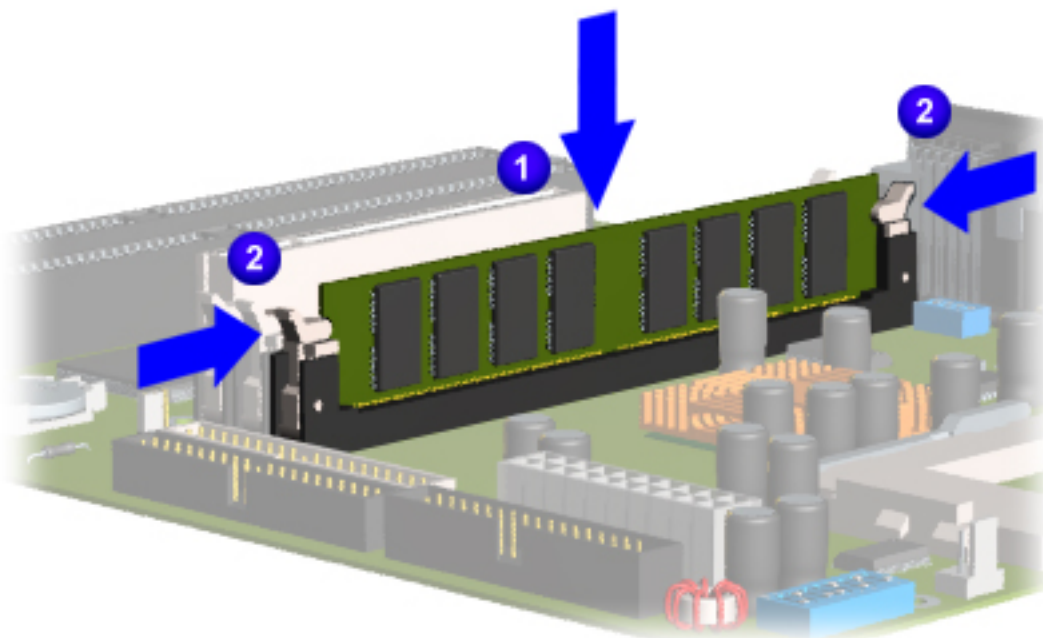
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## REMOVAL & REPLACEMENT

### *System Board Components*

#### Memory Module (DIMM)



To replace the DIMM, follow the procedure below.

Push the  DIMM down into the system board socket and  close the retention clips.

**CAUTION**

**CAUTION:** Ensure the DIMM is properly aligned and seated in the system board socket before reassembling the computer.

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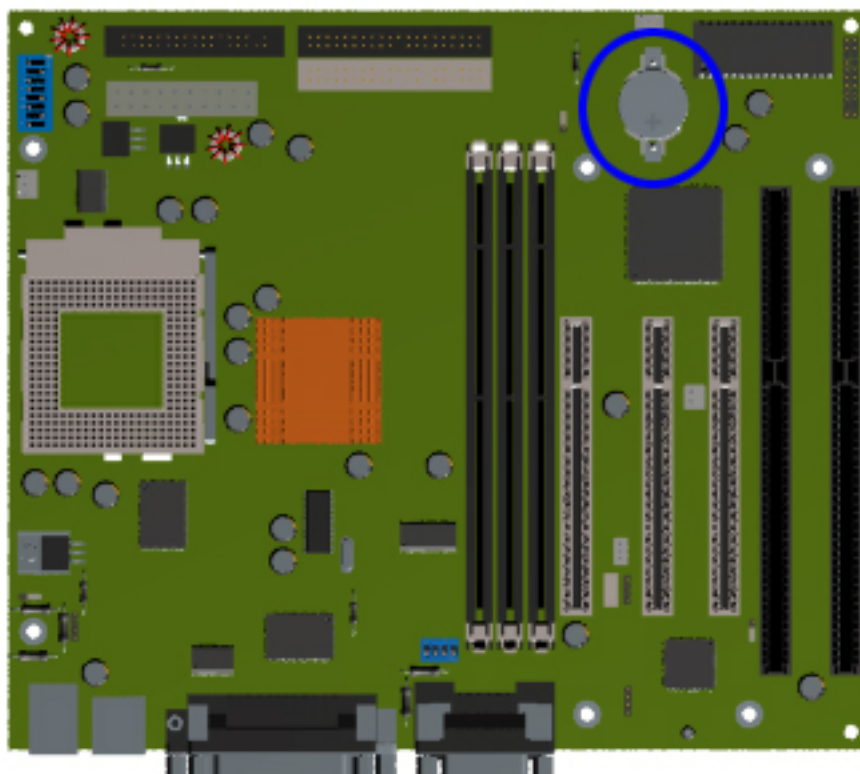
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## REMOVAL & REPLACEMENT

### *System Board Components*

#### Real Time Clock Battery (RTC)



- 1 [Perform preparation procedures.](#)
- 2 [Remove the chassis cover.](#)
- 3 [Remove the fax/modem.](#)
- 4 [Remove the system board.](#)
- 5 Locate the RTC battery.

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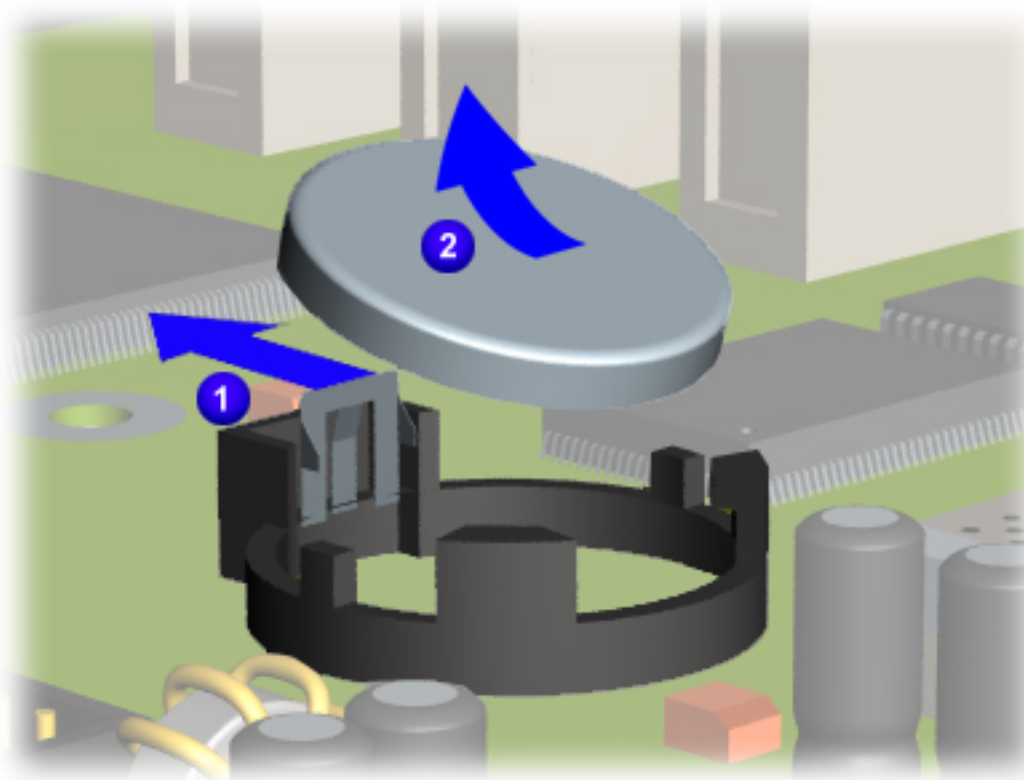
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## REMOVAL & REPLACEMENT

### *System Board Components*

#### RTC Battery



**6**

Pull out on the socket lever  and  lift the RTC battery out of the socket.

#### Replacement

To replace the RTC battery, reverse this procedure.

**WARNING:** The clock/CMOS lithium battery may explode if mistreated. Do not abuse. Use only replacement batteries supplied by Compaq Computer Corporation.

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## REMOVAL & REPLACEMENT PROCEDURES - INDEX PAGE

This section provides general service information for Compaq 5400 Series Personal Computers. Adherence to the procedures and precautions described in this section is essential for safe and proper service.

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Memory Module  
Fan assembly with Active Heatsink  
Processor

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ZIP drive

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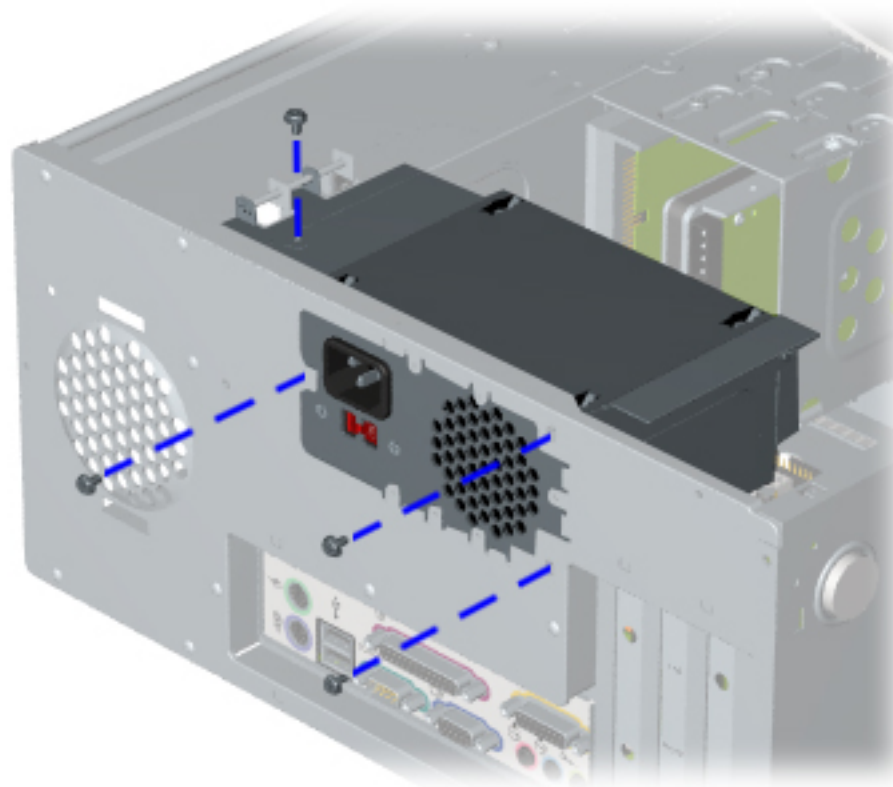
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**Power Supply**

## REMOVAL & REPLACEMENT

### Power Supply



#### Removal

- 1 [Perform preparation procedures.](#)
- 2 [Remove the chassis cover.](#)
- 3 [Disconnect all power cables from the CD, hard and diskette drive.](#)
- 4 Remove three screws that secures the power supply screen to the rear of the chassis.
- 5 Remove screw located on the side of the power supply.

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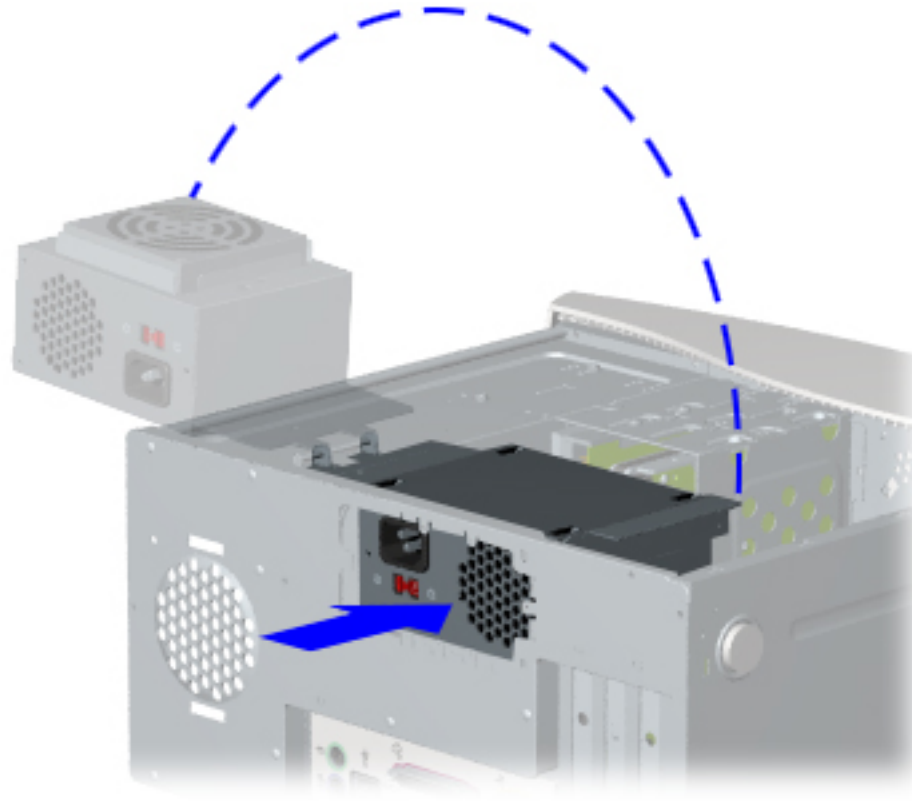
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**Power Supply**

## REMOVAL & REPLACEMENT

### *Power Supply*



### **Removal**

- 6** Pull up on the power supply, flip it up and away, and slide it to the right to remove it from the chassis slot.

[Next Step](#)

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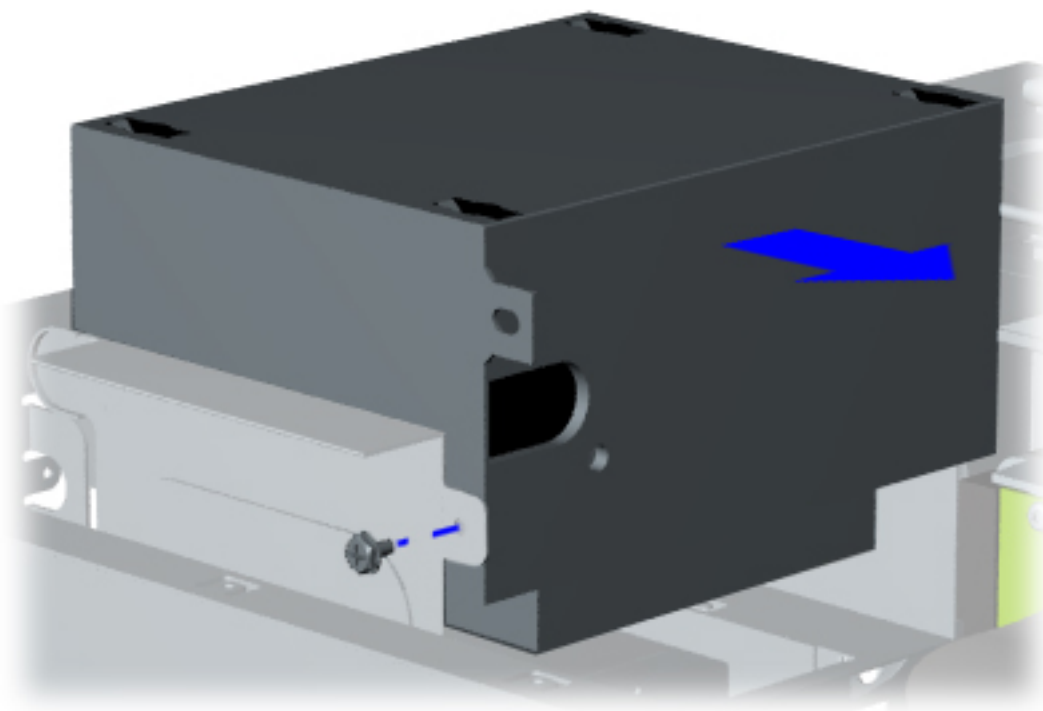
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**Power Supply**

## REMOVAL & REPLACEMENT

### *Power Supply*



#### **Removal**

- 7** Disconnect the power supply cable from the system board.
- 8** Remove screw located near the power supply cable which secures the power supply to the cage and pull the power supply from the cage.

#### **Replacement**

To replace the power supply, reverse this procedure.

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## ILLUSTRATED PARTS CATALOG

### Mass Storage Devices



### Spare Part Description

### Spare Part No.

1. 1.44-MB Diskette Drive	138647-001
2. 13.0-GB Hard Drive (Models: 5451, 5457, and 5465)	159883-001
10.0-GB Hard Drive (Model: 5461)	159882-001
8.0-GB Hard Drive (Models: 5443, 5441, and 5447)	159881-001
6.0-GB Hard Drive (Model: 5440)	159880-001
4.3-GB Hard Drive (Model: 5423)	138648-001
3. 32x CD Drive	138646-001
4. CD-RW Drive (Models: 5451 and 5461)	159878-001
5. 100-MB ZIP Drive (Model: 5465)	159879-001



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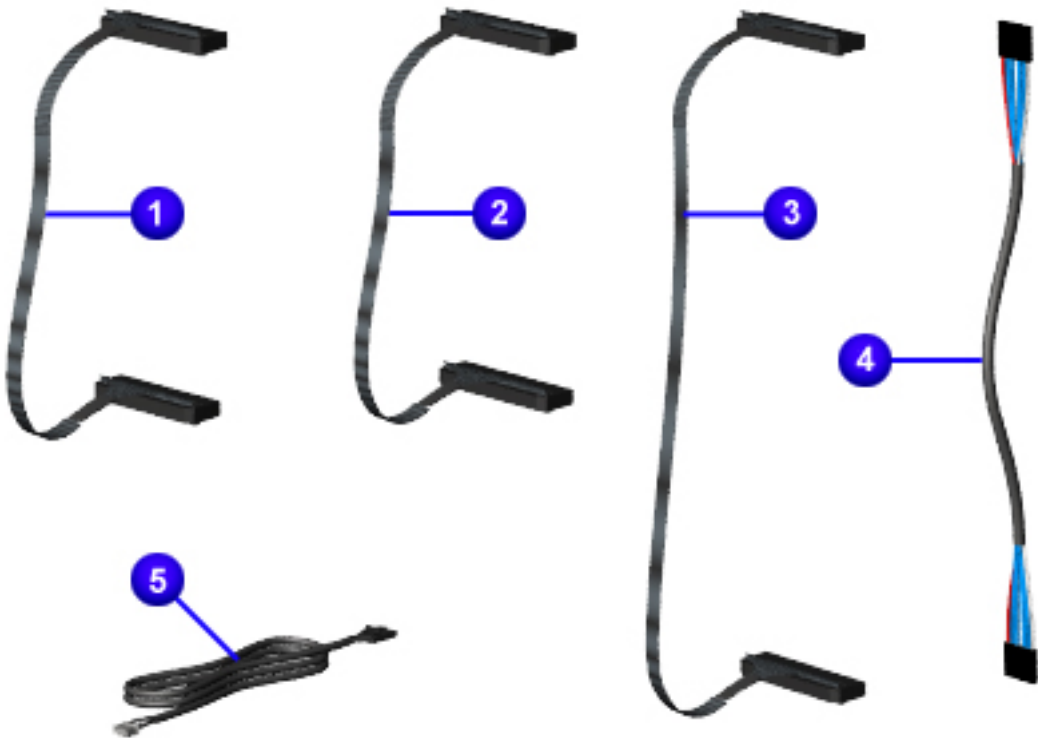
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## ILLUSTRATED PARTS CATALOG

### *Miscellaneous Cables*



### **Spare Part Description**

#### ***Miscellaneous Cable Kit (Content Includes)***

1. CD Drive Cable
2. 1.44-MB Diskette Drive/ZIP Cable
3. Hard Drive Cable
4. Power Cable
5. Button Board Cable

### **Spare Part No.**

159877-001

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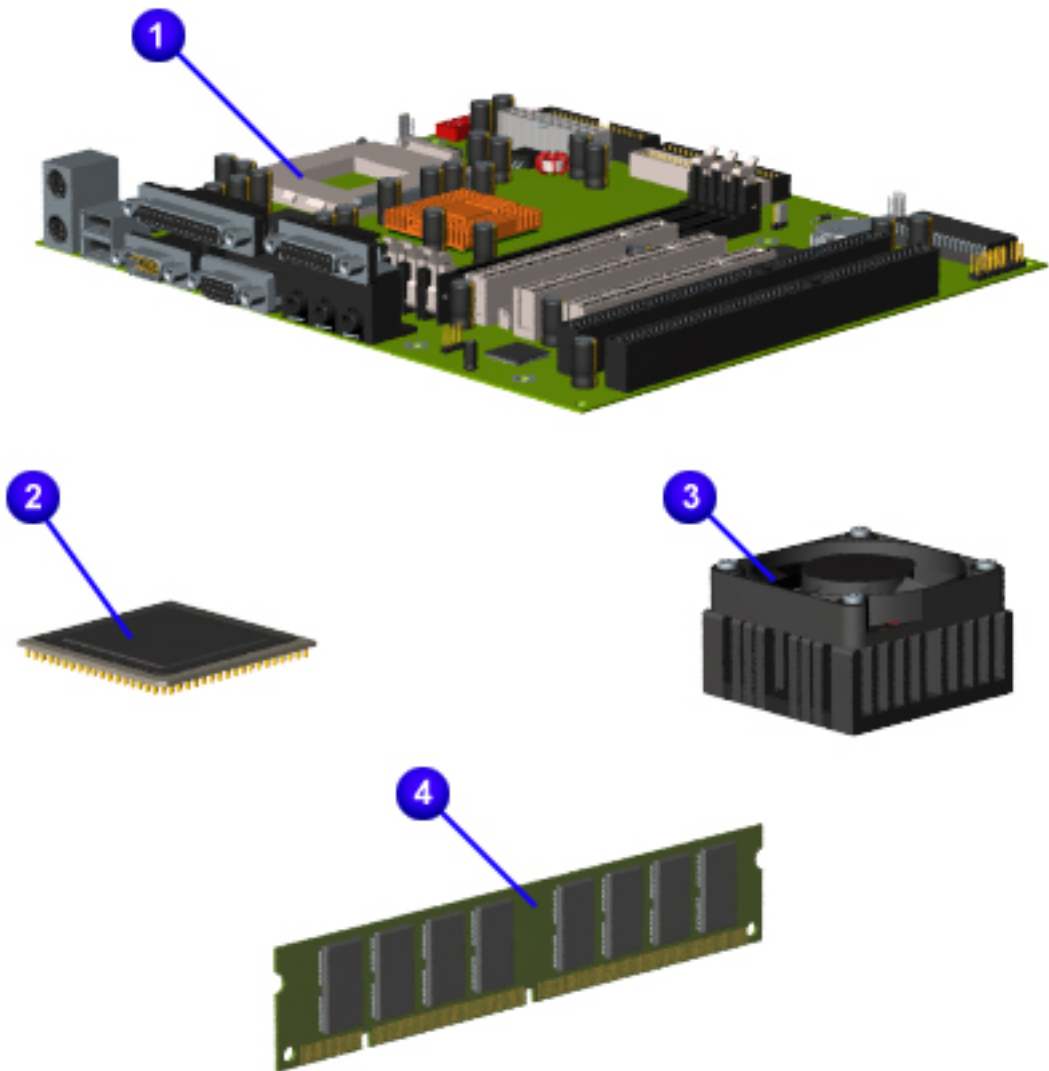
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## ILLUSTRATED PARTS CATALOG

### Standard and Optional Boards



Spare Part Description	Spare Part No.
1. System Board w/o processor	159870-001
2. Processor K6II/500 - Models: 5451, 5461, and 5475	159875-001
Processor K6II/475 - Models: 5441, 5443, 5457, 5460, and 5465	159873-001
Processor K6II/466 - Model: 5452	
Processor K6II/450 - Models: 5423, 5440, and 5447	159872-001
Processor K6II/433 - Model: 5411	
Processor K6II/380 - Model: 5410	159871-001
3. Fan w/Active Heatsink	159884-001
4. 32-MB 100-MHz Memory Module DIMM (Model: 5423)	138651-001
64-MB 100-MHz Memory Module DIMM (Models:)	149425-001
5. 10/100 PCI Card (Not shown)	159876-001

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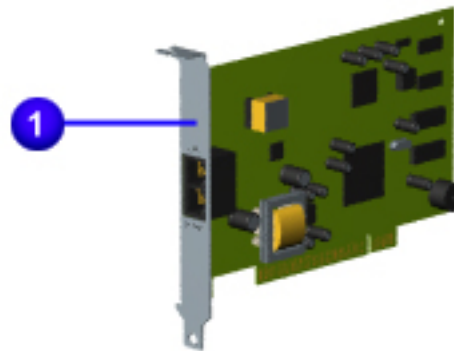
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### Spare Part Description

### Spare Part No.

Lucent PCI 56K Data/Fax  
Modem

138650-001

CIS/PCTEL 56K Data/Fax  
Modem

160206-001

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ILLUSTRATED PARTS CATALOG

Keyboard

Spare Part Description	Spare Part No.
1. Easy Access Internet Keyboard, U.S.	144359-001
Easy Access Internet Keyboard, Latin America	144359-161

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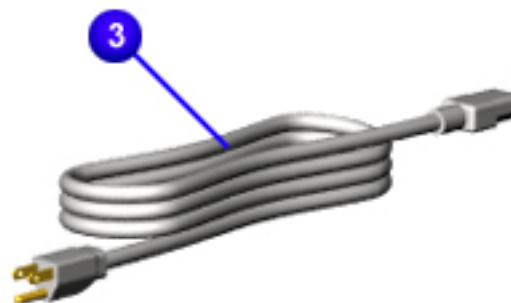
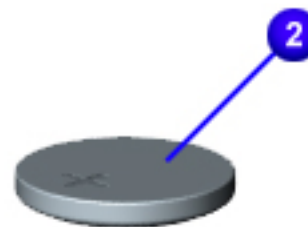
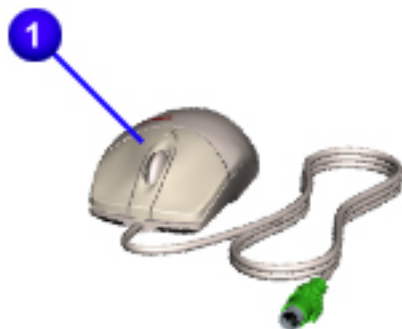
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## ILLUSTRATED PARTS CATALOG

### Miscellaneous Parts



Spare Part Description	Spare Part Number
------------------------	-------------------

1 Mouse	159887-001
2 RTC Battery	144361-001
3 Power Cord	144358-001

Spare Parts (Not shown)
-------------------------

15' Display Panel (Model: 5465)	
Front Bezel	159219-001
Power Supply 110 Watts	138652-001
Miscellaneous Hardware/Plastics Kit	147349-001

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## ILLUSTRATED PARTS CATALOG

### *Return Kit*

Spare Part Description	Spare Part Number
Return Kit	138654-001

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ILLUSTRATED PARTS CATALOG

Documentation & Software

Description	Spare Part Number
Compaq Presario 5400 Series - User's Guide	159888-001
Compaq Presario 5400 Series - User's Guide, Latin America	159888-161
Quick Restore CD, U.S. and Caribbean, Model: 5423	159889-001
Quick Restore CD, Latin America and Spain, Models: 5423 and 5543	159890-161
Quick Restore CD, Model: 5540	159891-001
Quick Restore CD, Model: 5441	159892-001
Quick Restore CD, Canada, Model: 5447	159893-001
Quick Restore CD, U.S. and Canada, Model: 5447	159894-001
Quick Restore CD, Sears, Models: 5451 and 5465	159895-001
Quick Restore CD, U.S., Model: 5461	159896-001
Quick Restore CD, Free PC	159897-001
Quick Restore CD, People PC	159898-001
QuickFind for Windows, North America, Latin America, Asia/Pacific	
QuickFind for Windows, Europe, Middle East, Africa	

\* QuickFind is updated monthly. To complete the QuickFind part number, add the suffix from the table below for the desired month. If you do not specify the 3-digit suffix, the default is the current month in which the order is placed.

Suffix	Month	Suffix	Month	Suffix	Month	Suffix	Month
-001	January	-004	April	-007	July	-010	October
-002	February	-005	May	-008	August	-011	November
-003	March	-006	June	-009	September	-012	December



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## ILLUSTRATED PARTS CATALOG

This section provides an illustrated parts breakdown and a reference for spare parts for the Compaq Presario 5400 Series Computers.

When requesting information or ordering spare parts for the Compaq 5400 Series Computers provide the computer's serial number. The [serial number](#) is located on front (bottom of bezel) and  rear of the computer.